Canal Winchester

Town Hall
10 North High Street
Canal Winchester, OH 43110

Meeting Agenda

September 18, 2017

6:30 p.m.

PUBLIC HEARING

City Council

Steve Donahue - President
Will Bennett – Vice-President
Bob Clark
Bruce Jarvis
Bobbie Mershon
Mike Walker

Call To Order

Roll Call

Purpose of Public Hearing

APL-17-002 NOTICE OF APPEAL REGARDING THE DENIAL OF CONDITIONAL USE APPLICATION CU-17-002 BY PLANNING AND ZONING COMMISSION TO ALLOW CERTIFIED OIL CONVENIENCE STORE AND FUELING STATION AT 880 WEST WALNUT STREET

Appellants: Certified Oil Company and Robert and Harold Stebelton

Attachments:

CU-17-002 Certified Oil Appeal Letter

CU-17-002 Findings of Fact

CU-17-002 Staff Report

CU-17-002 EMH&T Certified Oil Traffic Study - June

CU-17-002 EMH&T Certified Oil Traffic Study - July

CU-17-002 Certified Oil Application

Staff Presentation (15 Minutes)

Appellants Presentation (15 Minutes)

Public Comments – Five Minute Limit Per Person

Council Discussion and Questions

Adjournment

BEFORE THE CITY COUNCIL OF

THE CITY OF CANAL WINCHESTER, OHIO

CERTIFIED OIL COMPANY, c/o Underhill & Hodge LLC 8000 Walton Parkway, Suite 260 New Albany, OH 43054, Appellant,	:	Conditional Use Application No. CU-17-002
ROBERT AND HAROLD STEBELTON 6155 Coonpath Rd. Carroll, OH 43112 v.	:	
PLANNING AND ZONING COMMISSION OF CANAL WINCHESTER, OHIO Municipal Building 36 South High Street Canal Winchester, Ohio 43110, Appellee.	:	

NOTICE OF APPEAL

Pursuant to Canal Winchester Zoning Code Section 1145.06, Certified Oil Company and Harold and Robert Stebelton ("Appellants"), hereby appeal the July 10, 2017 decision of the Planning and Zoning Commission of the City of Canal Winchester, Ohio denying Conditional Use Application No. CU-17-002. Pursuant to Canal Winchester Zoning Code Sections 1145.04 and 1145.06, Findings of Fact and Conclusions of Law shall be memorialized by the Canal Winchester Planning and Zoning Commission.

Appellants Conditional Use process was fraught with procedural irregularities, they therefore bring this appeal on both the merits of the application under Canal Winchester Zoning Code Section 1145.03 and on procedural grounds. Appellants reserve the right, subject to cooperation in good faith by Canal Winchester, to request a reconsideration of the decision by its Planning and Zoning Commission who voted by majority to support the request. Appellants further reserve the right, notwithstanding the filing of this Notice of Appeal, to appeal matters of interpretation directly to Planning and Zoning Commission under Canal Winchester Zoning Code Section 1139.01(d).

Pursuant to Canal Winchester Zoning Code Section 1145.06(a), Appellants request that the Planning and Zoning Administrator turn over to City Council all information related to Conditional Use Application No. CU-17-002, including meeting dates, e-mail correspondence with the Appellants and their agents, and any non-privileged written communications among and/or between City Staff, Planning Commission Members, and others.

The Appellants seek to make use of a corner property along a commercial corridor for commercial purposes, the City Staff started and remained adamantly opposed to Appellants use for reasons unknown. This arbitrary and capricious approach to Appellants request was exhibited by the refusal of application submittals, procedural delays, refusals to meet, submission of irrelevant evidence for Planning and Zoning Commission consideration, and ignoring existing and valid legal rights related to access to the property from adjacent roadways.

A majority of the Planning Commission members voting concluded that Appellants Conditional Use request met the Criteria for Approval under City of Canal Winchester Zoning Code Section 1145.03, but by quirk or interpretation its request was still disapproved. The weight of the credible evidence warrants the approval of Appellants Conditional Use request. A decision denying the request is unreasonable, arbitrary, capricious, and unconstitutional under the law and must be overruled by City Council. Further arguments and evidence are forthcoming pending scheduling of a hearing with City of Canal Winchester City Council.

Appellants hereby request a hearing and decision in accordance with Canal Winchester Zoning Code Section 1145.06.

Respectfully submitted,

David Hodge (0075320)
Underhill & Hodge LLC
8000 Walton Parkway, Suite 260
New Albany, OH 43054
Phone: (614) 335-9320
Fax: (614) 335-9329
david@uhlawfirm.com

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true copy of the foregoing was served via e-mail and hand-delivery on July 20, 2017, upon Amanda Jackson, Clerk of Council and Andrew Moore, Planning and Zoning Administrator, of the City of Canal Winchester, Ohio, 36 S. High Street, Canal Winchester, Ohio, 43110.

David Hodge

BEFORE THE PLANNING AND ZONING COMMISSION
OF THE CITY OF CANAL WINCHESTER

In re Application of John Damrath representing Certified Oil Company for a Conditional Use Permit for Parcel No. 184-001287, located at 880 West Walnut Street for a 4,500 sq. ft. Certified Oil convenience market and fuel center.

This application is before the Commission on Certified Oil's conditional use application to allow an automobile convenience market and fuel center use within the Limited Manufacturing District. The Commission makes the following findings of fact and conclusions of law.

I. FINDINGS OF FACT

1. On April 17, 2017, John Damrath of Certified Oil Company ("Certified Oil") submitted an Application for a Conditional Use Permit for an automobile convenience market and fuel center located at 880 West Walnut Street, parcel number 184001287. The subject property consists of 3.70 acres located at the north west corner of Gender Road and West Walnut Street. The property is zoned Limited Manufacturing (LM) and is part of the West Walnut Industrial Park. Properties to the south, west and east are developed properties in the LM zoning district. Properties to the north, across the railroad tracks, is the site of a public water tower that is zoned Planned Commercial District (PCD).

2. Certified Oil proposed the 3.70 acres be developed to include a 4,500 sq. ft. convenience market, 20 parking stalls, and 16 fueling locations at eight pumps under two separate canopies with one access point located north of the stop bar at the intersection of Gender Road and West Walnut Street, and the second access point located on West Walnut Street, west of the stop bar for the West Walnut Street and Gender Road intersection.

3. On June 12, 2017, the Planning and Zoning Commission held a public hearing on Certified Oil's conditional use permit. The Planning and Zoning and Commission reviewed the materials submitted with the application and testimony from the representatives of Certified Oil. The Planning and Zoning Commission voted to table the discussion so that it would have additional time to consider the materials and Certified Oil would have time to make modifications to its application and site plan.

4. On July 10, 2017, the Planning and Zoning Commission held a second public hearing on Certified Oil's conditional use permit. The Planning and Zoning Commission reviewed the materials submitted with the application, discussed the changes made to the application since the June 12, 2017 meeting, and heard testimony from the representatives of Certified Oil. The Planning and Zoning Commission voted on the conditional use permit. The permit was denied.

II. CONCLUSIONS OF LAW

1. Under Codified Ordinance 1145.03, the following criteria shall be considered by the Commission in reaching its determination:

(a) The proposed use is a conditional use of the zoning district and the applicable development standards of this Zoning Code are met.

(b) The proposed use is compatible with adjacent land use, adjacent zoning, and to appropriate plans for the area.

(c) The proposed use will not adversely impact access, traffic flow, and other public facilities and services.

(d) The proposed use will not result in the destruction, loss or damage of a natural, scenic or historic feature.

(e) The proposed use will not adversely affect the public health, safety, convenience, comfort, prosperity, and general welfare.

2. A claim of invalidity on the authorization or denial of a conditional use permit lies with the party contesting the determination. *Community Concerned Citizens, Inc. v. Union Twp. Bd. of Zoning Appeals* (1995), 66 Ohio St.3d 452. In other words, the applicant bears the burden of proving that he or she meets the criteria for grant of a conditional use permit.

3. Section 1171.03 of the Codified Ordinances sets forth the conditional uses that may be allowed in the Limited Manufacturing District subject to approval in accordance with Chapter 1145. Section (e) specifically delineates Automobile Convenience Markets, Automobile Repair and Services, and Automobile Service Stations as conditional uses.

4. An Automobile Convenience Market is defined as: A place where gasoline, motor oil, lubricants, or other minor accessories are retailed directly to the public on the premises in combination with the retailing of items typically found in a convenience food market or supermarket.

5. Based on the Zoning Code, Certified Oil's proposed use of the land as an automobile convenience market and fuel center is a conditional use in the district. The Planning and Zoning Commission reviewed the application and determined the proposed development meets the required development standards with the exception of the proposed access drive at West Walnut Street.

6. The proposed use is not fully compatible with the adjacent land use. The proposed use is located in a Limited Manufacturing District and is part of a developed industrial park. A convenience market and fuel center would serve the traveling public along the Gender Road corridor and would not be in direct conflict with the proposed use. However, the most appropriate

use of the land would be to further develop the site for an industrial use that would provide additional economic development opportunities for the community.

7. The proposed automobile convenience market is not in conformance with the City's adopted comprehensive plan – the Village of Canal Winchester Community Plan Update – which sets forth the recommendation that the "...Village maintain the industrial park as is. Only light industrial uses will be permitted if future redevelopment occurs."

8. The proposed access point along Gender Road is not compatible with Canal Winchester's Gender Road Access Management Plan, which states that no direct private access should be permitted if a property has other reasonable alternative access or an opportunity to gain such access. Alternative access is available on West Walnut Street. The proposed right-in access drive on Gender Road at approximately 135 feet from the intersection is not compatible with the adopted plan that assists with preserving the safety and functionality of this intersection.

9. The proposed automobile convenience market and fuel center, with the proposed site plan and access points, would adversely impact access to the West Walnut Industrial Park as well as traffic flow on Gender Road and West Walnut Street. The proposed access drive has the potential to reduce safety and capacity along Gender Road.

10. The proposed use will not result in the destruction, loss or damage of a natural, scenic, or historic feature.

11. The proposed use as an automobile convenience market will adversely impact the public safety, convenience, comfort, prosperity, and general welfare of Canal Winchester residents and the traveling public along the Gender Road corridor. The proposed negative impacts on traffic movement in the Gender Road corridor will impact the public safety, convenience, and comfort of those traveling this corridor. Allowing access at these points with the proposed traffic that is

generated will lead to a decrease in safety and the potential for additional traffic incidents at the Gender and Walnut intersection. This negatively impacts the convenience of the public and their comfort due to additional traffic delays caused by this development.

12. The proposed development will adversely impact the prosperity and general welfare of the community due to the decreased revenue for the City of Canal Winchester and increased demand on public police resources. Replacing an industrial building that can employ significant number of workers who generate substantial revenue for the City of Canal Winchester with an automotive convenience market will adversely impact the municipal revenues and therefore the prosperity of the Community. Public safety burdens are also increased with the traffic from the site and automobile markets create a significantly greater need for policing services than an industrial building.

13. Therefore, the Planning and Zoning Commission denies the conditional use permit to allow an automobile convenience market and fuel center, located on West Walnut Street, parcel number 184001287.

DATE 7/10/2017

BILL CHRISTENSEN

Concur	Dissent	Abstain
[X]	[ ]	[ ]

JOE DONAHUE

Concur	Dissent	Abstain
[ ]	[ ]	[ ]

BRAD RICHEY	☐ Concur	☒ Dissent	☐ Abstain
JUNE KONOLD	☐ Concur	☐ Dissent	☐ Abstain
MICHAEL VASKO	☐ Concur	☒ Dissent	☐ Abstain
JOE WILDENTHALER	☒ Concur	☐ Dissent	☐ Abstain
DREW GATLIFF	☐ Concur	☒ Dissent	☐ Abstain

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Conditional Use #CU-17-002
Certified Oil

Owner:	Robert and Harold Stebleton
Applicant:	John Damrath of Certified Oil
Location:	880 West Walnut Street (PID 184-001287)
Existing Zoning:	LM (Limited Manufacturing)
Request:	Conditional Use to allow for automobile convenience market use within the LM - Limited Manufacturing district.

Location and Surrounding Land Uses
The subject property consists of 3.70 acres located at the north west corner of Gender Road and West Walnut Street. The property is zoned Limited Manufacturing (LM) and is part of the West Walnut Industrial Park. Properties to the south, west and east are developed properties in the LM zoning district. Properties to the north, across the railroad tracks, is the site of a public water tower that is zoned Planned Commercial District (PCD).

Code Section
Section 1171.03(e) allows for the following as a Conditional Use in the Limited Manufacturing zoning district: Automobile Convenience Markets, Automobile Repair and Services, and Automobile Service Stations. No portion of an Automobile Service Station's structure or its appurtenances, including ancillary, associated or auxiliary equipment, shall be located in front of the established building line. (Ord. 23-11. Passed 4-4-11.)

Automobile Convenience Market is defined as: A place where gasoline, motor oil, lubricants, or other minor accessories are retailed directly to the public on the premises in combination with the retailing of items typically found in a convenience food market or supermarket.

Analysis
The applicant is requesting the property be used as a Certified Oil convenience market and fuel center. The property is proposed to be used as a Certified Oil including a 4,500 square feet convenience market, 26 parking stalls, and 16 fueling locations at eight (8) pumps under two (2) separate canopies.

Access is proposed from two access points. A right-in access point that is located approximately 105 feet north of the stop bar at the intersection of Gender Road and West Walnut Street. This access point is proposed at 22 feet wide with a 150 feet deceleration lane on Gender Road.

The second access point is proposed on West Walnut Street and is located 177 feet west of the stop bar for the West Walnut Street and Gender Road intersection. This access point is proposed to be a full access point and is designed to be 35 feet wide. The applicant has indicated that the location 177 feet west of the intersection is the distance for the 95th percentile queuing of the PM peak hour traffic at this intersection.

The traffic study no longer contemplates additional development on this site so no additional future access considerations are shown. Based on the proposed application and discussions from the developer, the remainder of the site will be vacant.

1145.03 Criteria for Approval of Conditional Uses

a. The proposed use is a conditional use of the zoning district and the applicable development standards of this Zoning Code are met.

    - The proposed use as an automobile convenience market facility is identified as a conditional use in the Limited Manufacturing zoning district as noted in Section 1171.03 (e). The development standards that this property are subject to are specified in various areas of the Canal Winchester Zoning Code. The Planning and Zoning Administrator has reviewed the application and found that the proposed development does meet the required development standards with the exception the proposed access drive at West Walnut Street.

b. The proposed use is compatible with adjacent land use, adjacent zoning, and to appropriate plans for the area.

    - The proposed use is compatible in some aspects with the adjacent land uses. A convenience market and fuel center would serve the traveling public along the Gender Road corridor. The adjacent land uses are industrial uses that would not be in direct conflict with the proposed use. However, the site is zoned for Limited Manufacturing and is part of a developed industrial park. Appropriate plans for the area would be to further develop the site for industrial use that would provide additional economic development opportunities for the community. This site has been zoned for manufacturing use since it was annexed into the Village of Canal Winchester in 1964. It has been used for warehouse and distribution uses since 1979.

      The site is within the Community Reinvestment Area which allows for a 15 year, 100% property tax exemption on the value of improvements. This district was created by Village Council in 1987 to encourage economic and community development that creates economic stability, maintains real property values, and generates new employment opportunities. The proposed facility on this site is not the highest and best use to live up to the standards that the community leaders intended when creating the CRA district which includes all of the West Walnut Industrial Park.

      The Village of Canal Winchester Community Plan Update, which was adopted in July of 1999, specifically addresses an industrial development strategy for the Walnut Street Industrial Park in Section 4 of its recommendations. It recommends that, "… the Village maintain the industrial park as is. Only light industrial uses will be permitted if future redevelopment occurs.". Therefore, the proposed use of an automobile convenience market is not in conformance with the adopted comprehensive plan of the community and not compatible with appropriate plans for the area.

      The Village of Canal Winchester also adopted the Gender Road Access Management Plan in 2004. Access management is a process that provides (or manages) access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity, and speed. Specifically, this plan aims to show where and how access can be provided for land this in not yet developed or for parcels where redevelopment occurs. The plan specifically states that no direct private access

should be permitted if a property has other reasonable alternative access or opportunity to obtain such access. In the case of this parcel reasonable access exists from West Walnut Street without the need for direct access to Gender Road. The subject parcel is specifically identified in the plan as having no new access permitted, since a reasonable alternative exists. The plan also states "Optimized signal operations and progression can only be maintained if no other signals are permitted along this segment of the corridor and if no direct access points are provided to any newly-developed parcels.". Therefore, the proposed access along Gender Road for this use is not compatible with the adopted access management plan for this corridor.

The Village of Canal Winchester also adopted the Canal Winchester Thoroughfare Plan on 6/26/2009. Section 9.0 of this thoroughfare plan address driveway locations and spacing. These guidelines are adopted to preserve the functional area of public street intersections, control and consolidate direct access to major roadway corridors, and to limit the number of conflict points and separate conflict areas. It specifically determines that the minimum distance from an intersection to an upstream right-in and right-out access point is 375 feet on Gender Road. It does not specifically address right-in access only. The proposed access drive on Gender Road at 105 feet from the intersection is not compatible with the adopted plan that assists with preserving the safety and functionality of this intersection.

c. The proposed use will not adversely impact access, traffic flow, and other public facilities and services.

- The proposed use as an automobile convenience market with the proposed site plans and access points would adversely impact access to the West Walnut Industrial Park as well as traffic flow on Gender Road and West Walnut Street. The proposed access drive at 105 feet from the intersection has the potential to reduce safety and capacity along Gender Road, and impact the functional area of this intersection. The City of Canal Winchester has undertaken considerable projects and spent vast sums on money on ensuring the traffic continues to move through the Gender Road corridor in a safe and efficient manner. In fact, we are currently designing additional improvements for the section of Gender Road from West Walnut Street south including the Gender and Groveport Road intersection.

  The Gender Road Access Management Plan adopted in 2004 specifically states that access should not be permitted on this parcel from Gender Road since alternative access is available along West Walnut Street. It goes on to specifically mention that optimized signal operations and progressions can only be maintained if no other signals are permitted along this segment of the corridor and if no direct access points are provided to any newly developed parcels. Therefore, permitting this direct access to Gender Road for the proposed use will negatively impact the signal timing and operation of the Gender Road and Walnut Street intersection along with potentially negative impacts on Gender Road and Canal Street traffic signal and the Gender Road and Groveport Road traffic signal within this corridor.

  The applicant has provided a traffic impact study for review. EMHT has reviewed the study and has provided comments in the supporting documents. This review makes recommendations to alter the striping and signalization at West Walnut Street and Gender Road intersection.

d. The proposed use will not result in the destruction, loss or damage of a natural, scenic, or historic feature.

    - The proposed use will take place on a previously developed site. Therefore, there is not an impact on natural, scenic, or historic features.

e. The proposed use will not adversely affect the public health, safety, convenience, comfort, prosperity, and general welfare.

    - The proposed use as an automobile convenience market will adversely impact the public safety, convenience, comfort, prosperity, and general welfare of Canal Winchester residents and the traveling public along the Gender Road corridor. The proposed negative impacts on traffic movement in the Gender Road corridor will impact the public safety, convenience, and comfort of those traveling this corridor. Allowing access at this point with the proposed traffic that is generated will lead to decrease in safety and the potential for additional traffic incidents at the Gender and Walnut intersection. This development has the potential to impact the timing of the traffic signal so it is operating at less than optimal. This negatively impacts the convenience of the public and their comfort due to additional traffic delays caused by this development.

      The proposed development will also adversely impact the prosperity and general welfare of the community. The site is currently being used as a warehouse operation for HFI, who's main office is located directly across West Walnut Street. HFI employs more than 300 people in the City of Canal Winchester and this site is necessary for their warehousing operations. Removing this industrial building whose workers generate significant revenue for the City of Canal Winchester and replacing it with a convenience market and fuel center will have adverse impacts on the municipal revenues and therefore the prosperity of the community. Additional public safety burdens are also created with the traffic from the site and public safety concerns associated with this traffic. An industrial building has little need for emergency services, however convenience markets have a much greater need for policing services. In fact, according to the Department of Justice, nearly 6% of all robberies at commercial establishments happen at convenience markets. Therefore, the demand on public police resources is significantly increased with this use and adversely impacts the prosperity and general welfare of the community.

<u>Staff Recommendations</u>

The applicant has not shown with the submitted application materials that they can meet the criteria for approval of a conditional use permit as stated in Section 1145.03. This is due to the adverse impacts on public safety, convenience, comfort, prosperity and general welfare of the community, as well as the plan being incompatible with approved plans for the area, staff recommends that conditional use application #CU-17-002 be denied as presented.

EMH&T
Engineers, Surveyors, Planners, Scientists

June 7, 2017

Mr. Lucas Haire
Development Director
City of Canal Winchester
36 S. High Street
Canal Winchester, OH 43110

Subject: Certified Oil Site at Gender Rd/Walnut St - Traffic Impact Study and Site Functionality Review

Dear Mr. Haire,

This letter summarizes our review of the May 22, 2017 traffic study for a proposed gas station site on the northwest corner of the Gender Road/Walnut Street intersection in Canal Winchester. In addition to the technical review of the study, the proposed development access was evaluated for functionality and conformance to transportation planning within the context of the Gender Road corridor. The provided site plan identifies a proposed access via one full-movement driveway on Walnut Street and a second, right-in/right-out driveway on Gender Road just north of the traffic signal at Walnut Street.

Commentary to Functionality and Conformance with Transportation Planning:

1. Direct access to Gender Road between US 33 and Groveport Road has been carefully planned for many years with development of a formal access management plan dating back to 2004. The *Gender Road Access Management Plan (AMP)* addresses Gender Road in three segments. The proposed development falls within Segment 2. The recommendations of the plan clearly defines that access to Gender Road within Segment 2 be limited to adjacent public streets. In the instance of the proposed developed the only permissible access in accordance with the AMP would be via Walnut Street. The proposed right-in/right-out access from Gender Road is in direct conflict with the AMP. Conformance with the adopted AMP is critical to ensure optimal operation of the existing synchronized traffic signal system along the entire corridor and to enhance public safety.

2. Subsequent to the Gender Road AMP, the City commissioned an update to the Thoroughfare Plan. This update, dated 6/26/2009 specifically identities Gender Road, north of Groveport Road as a Major Arterial. Section 9.0 of the updated Thoroughfare Plan identifies the minimum distance from an intersection to an upstream right-in/right-out access point to be 375 feet on Gender Road (a major arterial.) The proposed access on Gender Road is only 105 feet from the intersection and is in direct violation of this standard. The total distance from the intersection

of Walnut Street and the railroad tracks is not sufficient to allow a right-in/right-out at any location in accordance with the Thoroughfare Plan requirements.

3. The proposed site plan identifies the proposed access off of Gender Road as a restricted right-in/right-out access drive. The drive as depicted in the site plan does not include any provisions to restrict traffic from attempting to make left-hand turns from the site to northbound Gender Road. Additionally, and of greater concern is the ability to control traffic from attempting to make left hand turns into the site from northbound Gender Road. Due to the number of lanes that comprise Gender Road and the traffic volume, traffic attempting either of these movements would create a significant safety concern. While left turns out of the site could be restricted by physical means such as inclusion of a concrete median in the driveway (coupled with associated signage) precluding attempted left-hand turns into the site from northbound Gender Road would prove more difficult. The presence of the dedicated southbound, left turn lane to Walnut Street would prevent the addition of a median. The practicality and effectiveness of signage alone to preclude left turns into the site is a significant concern.

Commentary Specific to the Traffic Impact Study

4. The study identifies a negative growth for traffic volumes along Gender Road which is counterintuitive to the general development and economic growth of the area. In reviewing the ODOT TDMS data sheet provided in Attachment B it is noted that there was a traffic volume decrease between 2015 and 2016 however when considering the longer term traffic volume history (2001 to 2016) if should be noted the traffic volume increase/decrease appears to be cyclical in nature with occasional years of small decreases mixed with years of larger (by percent) increases. As such, traffic volume projections for the study should consider the longer term growth pattern which has exceeded the assumed 0.5% rate. Recent studies to facilitate public roadway improvements along Gender Road have used growth rates of between 1.0% and 1.5%.

5. The traffic counts completed for the study were done on March 15th, 2017. This is just several weeks after the initial opening of the brewing and restaurant facility located on Walnut Street east of Gender Road. Full operation of the facility did not commence until after the counts were completed. These counts may not have properly characterized the current traffic volume associated with that new development as "typical" operation was not likely realized until after the counts were obtained. In addition the site is not yet fully developed. While not impacting the access analysis to the proposed site, the actual current and future volumes associated with the adjacent development need to be considered when evaluating the impact the proposed site may have on the function of eastbound Walnut Street at Gender Road.

6. This study provides trip generation calculations for an assumed land use for the vacant lot on the north edge of the site, but there is no mention or illustration of proposed access to and from the site. Please include an illustration of proposed access for this portion of the site.

7. ITE Land Use Code # 945 – *Gasoline/Service Station with Convenience Market* includes trips to the convenience market where the primary business is the fueling of motor vehicles. This report seems to included additional trip generation for the convenience store separately ITE #820 also added for the convenience store. Please modify the trip generation to correct this seemingly double counting of trip generation for the convenience store.

8. The size assumed as shopping center in the vacant lot does not match the proposed acreage (1.31 acres) on the site plan (1.28 acres * 10,000 SF per acre = 12,800 sf).

9. Posted speed limits are 35 mph on Gender Road and 25 mph on Walnut Street. Due to the major arterial classification of Gender Road and the provisions of Section 104.2 of the ODOT L&D Manual, Volume 1, a design speed of 40 mph should be used for the analysis along Gender Road. Using this design speed is further supported by the information shown in Attachment 2 which identifies an 85th percentile speed of slightly over 40 mph.

10. The existing EBRT lane at Gender Road and Walnut Street is around 140 feet in length. Adding a full access drive on Walnut Street will impact the eastbound approach. No mention or calculations provided for turn lane lengths in the report for this movement. This function should be evaluated in the study to understand the potential impact from the site development. This turn lane may need to be extended to account for longer queues on the eastbound approach due to added site traffic on Walnut Street.

11. In the appendix material, some of the scenario labels for the traffic assignment are seemingly incorrect or mislabeled and should be standard (Background, Non Pass-By, Pass-By, Total Traffic, No Build, and Build). The current labels make it hard to follow the calculations for each scenario.

12. ITE trip generation methodology includes average pass-by rates for a number of typical land uses, including Land Use #820 Shopping Center. For that use, the ITE Handbook indicates the average rate is 34% for the PM peak hour according to Table 5.6 of the *Trip Generation Handbook, Second Edition*. This report used the fitted curve equation to get a pass-by rate of 70% and 91% which are too extreme. These calculations benefit the site since they are based on a very small square footage of retail use and end up suggesting a large majority of site traffic is already on the adjacent street and that the site adds almost no new trips. While pass-by is a strong component for a gas station with convenience market, we don't find these high rates to be acceptable. Please recalculate the pass-by traffic using the average rate instead of the fitted curve equation rate.

These comments summarize our review of the completed Certified Oil Site traffic study and function of the proposed site on Walnut Street at Gender Road. If you have questions or comments, please contact either of us directly at your convenience.

Sincerely,

Shane J. Spencer, P.E.
Senior Project Manager
City of Canal Winchester's Consulting Engineer

Douglas A. Bender, PE, PTOE
Senior Traffic Engineer

Cc: Matt Peoples, City of Canal Winchester
Bill Sims, City of Canal Winchester
Andrew Moore, City of Canal Winchester

EMH&T

Engineers, Surveyors, Planners, Scientists

July 5, 2017

Mr. Lucas Haire
Development Director
City of Canal Winchester
36 S. High Street
Canal Winchester, OH 43110

Subject: Certified Oil Site at Gender Rd/Walnut St - Traffic Impact Study and Site Functionality: Second Review

Dear Mr. Haire,

This letter summarizes our review of the June 23, 2017 response from Certified Oil regarding the previous comments on their traffic study and site functionality for the proposed gas station site at the Gender Road/Walnut Street intersection. Per the response letter, the site plan has been updated to revise the planned driveway on Gender Road to a right-in-only driveway (no egress) on Gender Road just north of Walnut Street. In addition, the traffic study has been revised to reflect the site changes and the previous comments. The following commentary is provided regarding the updated site plan and traffic study:

Commentary to Functionality and Conformance with Transportation Planning:

1. As stated previously, direct access to/from Gender Road does not comply with the 2004 *Gender Road Access Management Plan (AMP.)* The updated site plan still reflects access from Gender Road which conflicts with the established AMP. However, the revised access has been limited to a right-in only function with a deceleration lane and appropriate curbing to restrict motorists from attempting non-permitted movements. It is anticipated that a right-in only access from Gender Road, upstream of the signalized intersection at Walnut Street would be the least impactful form of access to the site from Gender Road.

   The *AMP* does not address any site specific access agreements which may have been in-place at the time of its development. Applicability of any existing access agreements (as referenced in the applicant's response) are solely subject to legal considerations whereas this review has been completed based on in-place engineering policies, practice and principles.

2. As previously commented, the initial site access (right-in/out) from Gender Road provided a direct conflict with the current Thoroughfare Plan based on its upstream location from the signalized intersection with Walnut Street. The reduction of this access to a right-in only effectively eliminates the conflict with the Thoroughfare Plan as spacing to upstream, right-in only access is not addressed therein. Based on the right-in access being upstream of the

signalized intersection and configured with a deceleration lane, we would not anticipate substantial interaction between this access point and the operation of the intersection.

Commentary Specific to the Traffic Impact Study:

An updated traffic study was provided to the City, dated June 22, 2017, that addresses previous City comments dated May 23, 2017. In response to the modified access to/from Gender Road, several follow-up comments have been generated based on the revised traffic study and new site ingress/egress concept and are as follows:

3. Due to the much heavier eastbound left turn volumes in the 2027 Build condition, it is recommended that current traffic signal at the Walnut Street/Gender Road intersection should be modified by the applicant to include an eastbound left turn phase with a new, five-section left turn signal head for the eastbound approach to address added site traffic on the west leg of the intersection. This signal modification should be accompanied by an added eastbound left turn loop detector for second car detection 25 to 30 feet from the eastbound stop bar in the existing left turn lane.

4. In addition, it is recommended that the applicant extend the existing eastbound right turn only lane on Walnut Street by approximately 125 feet to the current HFI access driveway. The turn lane extension should end at the HFI driveway radius return and will allow right turn site traffic to enter this turn lane to re-enter Gender Road. It is required to reduce or eliminate the times when eastbound left turn traffic is queued past the current right turn lane drop. This will help address the previous comment #10 since the site right turn egress from the site directly to Gender Road has now been eliminated.

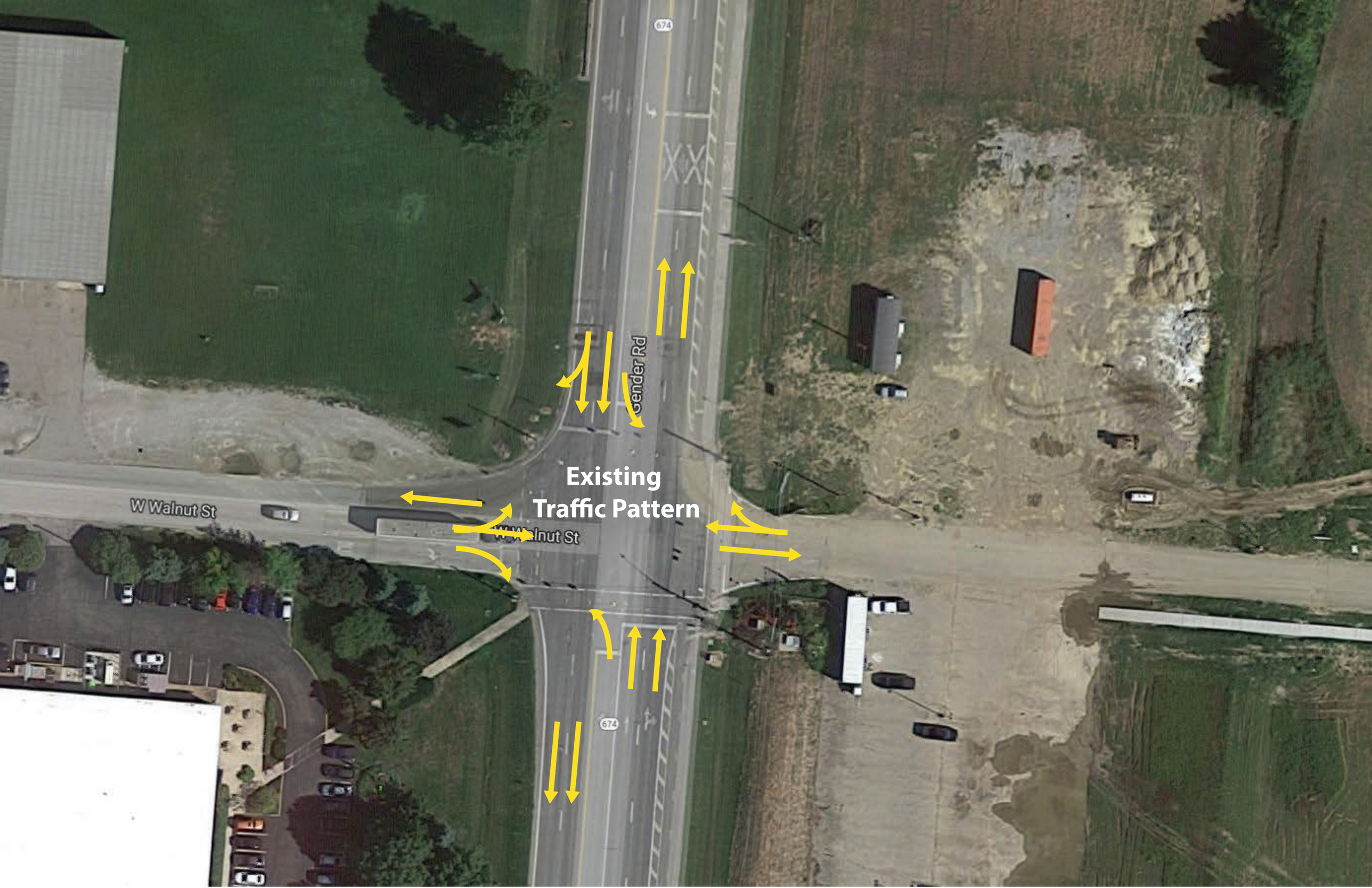
These comments summarize our review of the original and modified Certified Oil Site traffic study and recent response regarding the planned site access modification along Gender Road. If you have questions or comments, please contact either of us directly at your convenience.

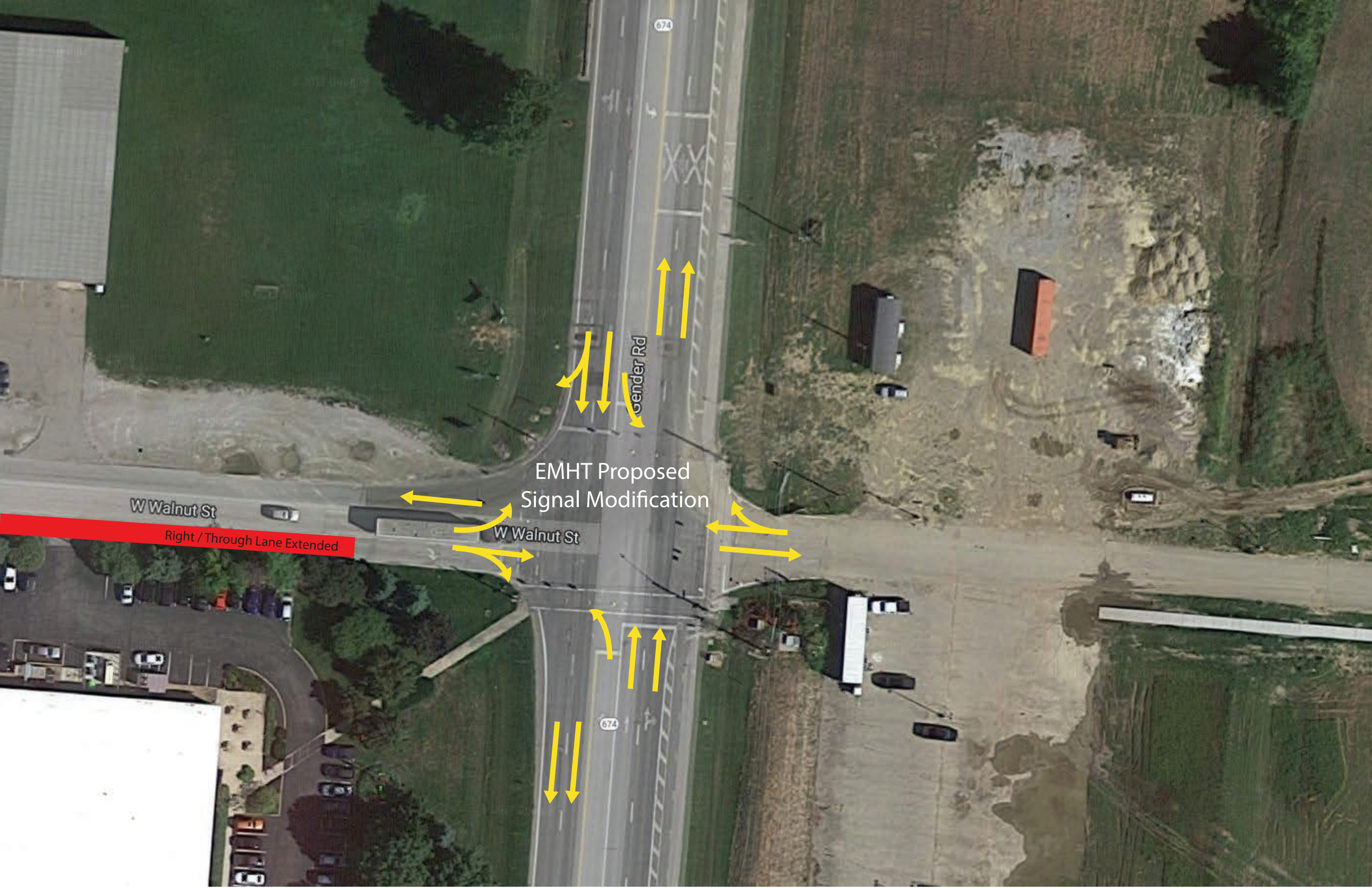
Sincerely,

Shane J. Spencer, P.E.
Senior Project Manager
City of Canal Winchester's Consulting Engineer

Douglas A. Bender, PE, PTOE
Senior Traffic Engineer

Cc: Matt Peoples, City of Canal Winchester
Bill Sims, City of Canal Winchester
Andrew Moore, City of Canal Winchester


674
Gender Rd
Existing
Traffic Pattern
W Walnut St
W Walnut St
674


674
Gender Rd
EMHT Proposed
Signal Modification
W Walnut St
W Walnut St
Right / Through Lane Extended
674

CANAL WINCHESTER
Established 1828

City of Canal Winchester

36 South High Street
Canal Winchester, Ohio 43110
Development Department
Phone (614) 837-7501 Fax (614) 837-0145

CONDITIONAL USE APPLICATION

rev. 09/24/2013

PROPERTY OWNER

Name Charlie Stebleton

Address 8230 Winchester Road, Carol, Ohio

Daytime Phone (614) 204-4665 Email c.harold@juno.com

APPLICANT

Name John Damrath

Address 949 King Ave. Columbus, OH 45212

Daytime Phone (614) 506 9435 Email jdamrath@certifiedoil.com

Address of Subject Property 880 W. Walnut St.

Current Zoning LM Description of Proposed Use Convenience Store & Fueling Center

Attach legal description and current survey (within 2 years) of the subject property and all supporting materials as required by Section 1145.02 (c) (see attachment). Additional information may be required by the Planning and Zoning Administrator or the Planning and Zoning Commission

I certify that the information provided with this application is correct and accurate to the best of my ability.

Property Owner's or Authorize Agent's Signature **Date** 4/12/17

DO NOT WRITE BELOW THIS LINE

Date Received: ___/___/_____ Fee: $_____ Paid ☐

Historic District: ___ Yes ___ No
Preservation District: ___ Yes ___ No

Date of Action: ___/___/_____

Application ___ No
Approved: ___ Yes
___ Yes, with conditions

Expiration Date: ___/___/_____

Tracking Number: CU - _____

Certified

23 June 2017

Mr. Andrew Moore
City of Canal Winchester, Ohio
Planning & Zoning
36 S. High St.
Canal Winchester, OH 43110

Re: Certified Oil Convenience Store – Site Plan Resubmittal

Dear Mr. Moore:

Certified Oil would like to respectfully submit the attached documentation in conjunction with the revised Site Plan documents to address staff comments provided 12 June 2017 via e-mail. We want to thank City Staff for their initial review of this application.

Below are responses to each comment received. A response has been noted in red to each comment.

The proposed access points be revised to meet the requirements of the Canal Winchester Thoroughfare Plan, with the Gender Road access being eliminated and the West Walnut Street access being moved further west to line up with the driveway around the rear of the building.
RESPONSE: Per the revised Traffic Study, the site is proposing to extend the deceleration lane and make the Gender Road access Right-In only. The West Walnut Street access is remaining in the same location as originally proposed , as the parking on the South side of the building has been relocated to eliminate traffic conflicts and help with vehicular maneuvering through the site.

That the plans be revised to show access to the vacant 1.43-acre lot that is being proposed.
RESPONSE: Certified Oil will be occupying the entire lot and a north parcel/lot is no longer being proposed, therefore, shared access to a second lot will not be needed.

That the landscape plan be revised to include a hedge that will be 4 feet in height as required in Section 1191.02 (c) and with the species approved by the Urban Forester.
RESPONSE: The landscape plan has been revised to include a hedge that will be 4 feet in height. Removing the Yew and replacing it with Woodward Arborvitae.

If you have any questions or need additional information, please do not hesitate to give us a call or email: 614-506-9435 (Cell) or jdamrath@certifiedoil.com. Thank you for your expeditious review of this resubmittal.

Sincerely,

John Damrath III

Conditional Use Statement

Certified Oil

June 23, 2017

The applicant, Certified Oil, seeks Planning Commission review and approval of a Conditional Use request for an "automobile convenience market" under the Limited Manufacturing District (L-M) – the property's existing zoning classification. The LM district exists for the purpose of accommodating industrial and related uses that do not create serious problems of compatibility with other land uses and to make provisions for certain commercial uses which are appropriately located ancillary to industrial users and which are necessary to service the immediate needs of people in the area.

The proposed automobile service market furthers the stated goal and purpose of the L-M district.

The Canal Winchester Planning and Zoning Code (the "Zoning Code") provides considerations to be examined in review of an application for a conditional use. Each of these criteria are hereafter stated in italics and individually addressed thereafter.

(a) The proposed use is a conditional use of the zoning district and the applicable development standards of this Zoning Code are met.

Yes. The Zoning Code in Section 1171.03(h) includes automobile convenience stores as a conditional use. Further, the proposed redevelopment meets all of the applicable development standards of the Zoning Code.

(b) The proposed use is compatible with adjacent land use, adjacent zoning, and to appropriate plans for the area.

Yes. The property is zoned in the L-M district, as are the properties to the south, west, northwest, and east. Along the north of the property is a railroad right-of-way, to the north is commercially zoned property in the PCD district, and to the northeast is property zoned apartment residential in the AR-1 district. An automobile convenience market – a conditional use provided in the L-M district – is an appropriate and compatible land use in the midst of the surrounding uses, and the surrounding zoning classifications and their families of permitted uses.

The applicant has no intentions of making use of the Community Reinvestment Area for the property but rather will work with Canal Winchester to include the property within an existing Tax Increment Finance (TIF) zone which a conservative estimate demonstrates will provide approximately $938,000 for use by Canal Winchester for existing area infrastructure needs. A copy of a TIF projection is included with the materials submitted as supplementary to this request.

Notwithstanding an apparent position to the contrary, and references in the June 12, 2017 Staff Report to the Gender Road Access Management Plan in 2004 and the Canal Winchester Thoroughfare Plan in 2004 for this approval request, in 2001 Canal Winchester entered into an Agreed Judgment Entry with the owners of the subject property to not object to access from Gender Road and to not deny access to Walnut Street. Any argument that this property is not entitled to appropriate access from both of the roads upon

which is fronts fails to comport with the spirit of that negotiated agreement. Neither of those documents stand to disallow access to the property from either road.

It is black letter law in Ohio that regulations which restrict real property are strictly construed in favor of the property owner, and that all doubts should be resolved against a possible construction thereof which would increase the restriction upon the use of such real estate. Stated differently, because such restrictions must be strictly construed, "the scope of the restrictions cannot be extended to include limitations no clearly prescribed. *Loblaw, Inc. v. Warren Plaza, Inc.* 163 Ohio St. 581, 592 (1955); and *Saunders v. Clark County Zoning Dept.,* 66 Ohio St.2d 259, 261 (1981). These citations are but two of an abundance of binding precedent on this well-settled law in Ohio.

(c) The proposed use will not adversely impact access, traffic flow, and other public facilities and services.

The proposed automobile convenience market will have no adverse or detrimental impact on access, traffic flow, or any other public facility or service. The site has been planned by civil engineers with the consultation of traffic engineers to function seamlessly with the existing transportation network. The site provides one access point from Gender Road, which is now planned as a right-in access only, consistent with the Agreed Entry between Canal Winchester and the property owner, and in furtherance of many individual Planning Commission Member remarks at the June 12, 2017 meeting. The Gender Road right-in access point will include a right-turn drop deceleration lane along the west side of Gender Road. This is appropriate will not impede the flow of traffic along Gender Road whatsoever. Further a full-service access point will be included along Walnut Street. These access points are appropriate and consistent with sound traffic engineering policies and principles and are submitted with supplemental Traffic Impact Analysis by a registered traffic engineer which demonstrates not adverse impact to access or traffic flow, and which further addresses items raised by the Canal Winchester consulting enginner.

(d) The proposed use will not result in the destruction, loss or damage of a natural, scenic, or historic feature.

No. This use will not have any impact whatsoever on any natural, scenic, or historic feature.

(e) The proposed use will not adversely affect the health, safety, convenience, comfort, prosperity, and general welfare.

An automobile convenience market on the subject property will not adversely affect the health, safety, convenience, comfort, prosperity, or general welfare of inhabitants of Canal Winchester, the region, or surrounding property owners or users. As provided above, this property is located along an intense commercial corridor which predominately houses commercial and industrial type uses. As planned, this property will provide for an appropriate redevelopment of the property and will not create any condition, either on-site or off-site, which will create an adverse affect to the general welfare.

An automobile convenience market is a permitted conditional use of the L-M district. Certified Oil is a proven quality leader of this land-use type and has planned this redevelopment appropriately, from both and aesthetic and functionality perspective.

Having demonstrated fulfillment of all conditions and criteria for approval of a conditional use, the applicant respectfully requests a positive recommendation from City Staff, and approval from the Planning Commission.

Respectfully submitted,

Certified Oil

By:

Attorney for the Applicant

CERTIFIED OIL - CANAL WINCHESTER: 30-YEAR COMMERCIAL NON-SCHOOL TIF (No School Taxes Captured)

Year	Units Built-Year	Units Subject to TIF	Total Market Value of Improvements (1)	Total Market Value with Triennial Appreciation	Assessed Value of Improvements Subject to TIF (2)	Estimated Property Taxes Collected (3)	Taxes to County(4)	Non-TIF to Schools (5)	Annual TIF PILOTS (6)
2018	1	1	$1,672,000	$1,672,000	N/A	N/A	N/A	N/A	N/A
2019	0	1	$1,672,000	$1,672,000	$585,200	N/A	N/A	N/A	N/A
2020	0	1	$1,672,000	$1,738,880	$585,200	$56,398	$0	$32,694	$23,704
2021	0	1	$1,672,000	$1,738,880	$608,608	$56,398	$0	$32,694	$23,704
2022	0	1	$1,672,000	$1,738,880	$608,608	$58,654	$0	$34,002	$24,652
2023	0	1	$1,672,000	$1,843,213	$608,608	$58,654	$0	$34,002	$24,652
2024	0	1	$1,672,000	$1,843,213	$645,124	$58,654	$0	$34,002	$24,652
2025	0	1	$1,672,000	$1,843,213	$645,124	$62,173	$0	$36,042	$26,131
2026	0	1	$1,672,000	$1,953,806	$645,124	$62,173	$0	$36,042	$26,131
2027	0	1	$1,672,000	$1,953,806	$683,832	$62,173	$0	$36,042	$26,131
2028	0	1	$1,672,000	$1,953,806	$683,832	$65,904	$0	$38,204	$27,699
2029	0	1	$1,672,000	$2,071,034	$683,832	$65,904	$0	$38,204	$27,699
2030	0	1	$1,672,000	$2,071,034	$724,862	$65,904	$0	$38,204	$27,699
2031	0	1	$1,672,000	$2,071,034	$724,862	$69,858	$0	$40,497	$29,361
2032	0	1	$1,672,000	$2,195,296	$724,862	$69,858	$0	$40,497	$29,361
2033	0	1	$1,672,000	$2,195,296	$768,354	$69,858	$0	$40,497	$29,361
2034	0	1	$1,672,000	$2,195,296	$768,354	$74,049	$0	$42,926	$31,123
2035	0	1	$1,672,000	$2,327,014	$768,354	$74,049	$0	$42,926	$31,123
2036	0	1	$1,672,000	$2,327,014	$814,455	$74,049	$0	$42,926	$31,123
2037	0	1	$1,672,000	$2,327,014	$814,455	$78,492	$0	$45,502	$32,990
2038	0	1	$1,672,000	$2,466,635	$814,455	$78,492	$0	$45,502	$32,990
2039	0	1	$1,672,000	$2,466,635	$863,322	$78,492	$0	$45,502	$32,990
2040	0	1	$1,672,000	$2,466,635	$863,322	$83,202	$0	$48,232	$34,970
2041	0	1	$1,672,000	$2,614,633	$863,322	$83,202	$0	$48,232	$34,970
2042	0	1	$1,672,000	$2,614,633	$915,121	$83,202	$0	$48,232	$34,970
2043	0	1	$1,672,000	$2,614,633	$915,121	$88,194	$0	$51,126	$37,068
2044	0	1	$1,672,000	$2,771,511	$915,121	$88,194	$0	$51,126	$37,068
2045	0	1	$1,672,000	$2,771,511	$970,029	$88,194	$0	$51,126	$37,068
2046	0	1	$1,672,000	$2,771,511	$970,029	$93,486	$0	$54,194	$39,292
2047	0	1	$1,672,000	$2,937,801	$970,029	$93,486	$0	$54,194	$39,292
2048	0	1	$1,672,000	$2,937,801	$1,028,230	$93,486	$0	$54,194	$39,292
2049	0	1	$1,672,000	$2,937,801	$1,028,230	$99,095	$0	$57,445	$41,649
Total	1						$0	$1,295,007	**$938,919**

Value Per Unit									
Improvement Value		$1,672,000					**Franklin County**	**Tax District #184**	
Land Value		$278,000							
Total Value		$1,950,000							
Annual Appreciation		**2.00%**					**Years for TIF**	**30**	
County % of Total Taxe		**1.50%**			**County TIF %**	**0.00%**	**Eff. Tax Rate**	**0.096374002**	
Schools % of Taxes		**57.97%**					**Begin**	**2018**	

(1) # of Total Units Built x Value Per Unit in Present Dollars, Less Land Value

(2) Total Market Value With Appreciation, Multiplied By 35%

(3) Assessed Value For Prior Year Multiplied By District Millage Rate

(4) Estimated Property Tax Payments Multiplied By County's Full Share of Taxes, Negotiated Share, and 50%

(5) Estimated Property Tax Payments Multiplied By Schools' Portion of Taxes

(6) Estimated Property Tax Payments Less School and County Shares

TREANORHL

17 April 2017

City of Canal Winchester, Ohio
Attn: Development Department
36 South High Street
Canal Winchester, OH 43110

Re: Conditional Use Application: Proposed C-Store / Fuel Center, 880 Walnut Street

Dear Sir or Madam:

On behalf of our client, Certified Oil Company, we, TreanorHL, P.A., respectfully submit this supporting documentation in conjunction with the conditional use application for the proposed convenience store (C-store) and fueling center to be located at the northwest corner of Gender Road and Walnut Street, specifically 880 Walnut Street.

As per Section 1145.02 (c) to supplement the Conditional Use Application and the Site Plan Application for a Redevelopment site at 880 Walnut Street, this document is to outline the use of the site and how the development will blend with the adjacent uses. The list of adjacent ownership and legal description of the parcel can be found on the planning documents attached.

This location will provide a convenient service location to meet the needs of citizens and visitors to the west side of the city, both to the retail/shopping centers to the north as well as the adjacent industrial users. Given the light industrial users to the west and east of the site, the C-store will give an added alternative to these businesses and their employees. Additionally, with Gender Road/SR 674 providing a direct link northward to Southeast Expressway/Highway 33, the proposed C-store and fuel center will provide the residents south of Main Street/ Groveport Road an easy stopping point both to and from work, school, or shopping. Certified Oil seeks to be a part of the community and to diversify the fueling options available to this area.

In terms of adjacent land uses, most of the surrounding area and properties are zoned Limited Manufacturing (LM). The City owned parcel north of the railroad is the only exception, which is zoned as Planned Commercial District (PCD). The site does not neighbor nor abut any residential development and does not impede any important view sheds. The intersection of Gender Road and Walnut Street provides important access to the Winchester Industrial Park and to the south serves existing neighborhoods and access to central Canal Winchester via the intersection with Main Street. Other retail uses are allowed within this zoning district and the placement of a fueling center and c-store within the existing industrial/business park would not create an impediment to the adjacent business or property owners.

If you have any questions or need additional information, please do not hesitate to contact the Applicant, Certified Oil, or myself: 785.727.2407 (direct dial) or mmurphy@treanorhl.com. Thank you for your expeditious review of this submittal.

Respectfully,
TreanorHL, P.A.

Matthew L. Murphy, P.E.
Principal

Tax Parcel ID # 184-001287-00 - 880 W. Walnut St.

Legal Description:

Situated in the State of Ohio, County of Franklin, and in the City of Canal Winchester:

Being located in the Northwest Quarter of Section 25, Township 11, Range 21, Congress Lands and being 4.208 acres out of that tract of land as conveyed to Lloyd E. Stebelton, by deed of record in Deed Book 3204, Page 239, all references being to records of the Recorder's Office, Franklin County, Ohio, and being more particuarly bounded and described as follows:

Beginning at a point in the centerline of Gender Road, at the northeasterly end of West Walnut Street. said point being located North 4°14'00" East, a distance of 30.00 feet from a railroad spike at the centerline intersection of said West Walnut Street and Gender Road, thence North 85°45'00" West with the northerly line of said West Walnut Street, a distance of 475.00 feet to an iron pin; thence North 4°15'00" East , a distance of 414.47 feet to an iron pin in the southerly right of way line of the C. & O. Railroad; thence South 78°54'19" East, with the southerly right of way line of said C. & O. Railroad, a distance of 478.30 feet to a point in the centerline of said Gender Road; thence South 4°14'00" West, with the centerline of said Gender Road, a distance of 357.47 feet to the place of beginning, containing 4.208 acres of land, more or less.

LESS AND EXCEPTING therefrom the following 0.5 acre tract as conveyed by Robert L Stebelton and Harold L. Stebelton to Village of Canal Winchester by document recorded on December 11, 2001 of record in Instrument No. 200112110288135.

Situated in the State of Ohio, County of Franklin, Madison Township, Village of Canal Winchester, and is part of the Northwest Quarter of Section #25, Township 11 North, Range 21, Congress Lands, and is apart of a 4.208 acre tract conveyed to Robert L. Stebelton, and Harold L. Stebelton as described in OR 03752H09, Franklin County Recorder's office, and is more praticulary described as follows

Commencing at Franklin County Monument Number 4452 at Centerline Station 91+52.00, the southeast corner of said northwest quarter, in the centerline of Gender Road (State Route 674);

Thence North 00 degrees 07 minutes 05 seconds East, along said centerline, for a distance of 495.60 feet, passing a railroad spike found at 465.60 feet, to the point of beginning of the following take (Centerline Station 96 +47.60);

Thence North 89 degrees 50 minutes 41 seconds West, 134.98 feet to an iron pipe set in the northerly right of way line of West Walnut Street, (Centerline Station 96+47.69, 135 feet left);

Thence North 00 degrees 02 minutes 35 seconds East, 14.95 feet to an iron pipe set (Centerline Station 96 +62.64, 135 feet left);

Thence South 89 degrees 52 minutes 55 seconds East, 78.00 feet to an iron pipe set (Centerline Station 96 +62.62, 57 feet left);

Thence North 00 degrees 07 minutes 05 seconds East, 349.20 feet to an iron pipe set on the south line of the C&O Railroad (Centerline Station 100+11.95, 57 feet left);

Thence South 83 degrees 06 minutes 07 seconds East, 57.40 feet to a mag nail set on the centerline of Gender Road (Centerline Station 100+05.07);

Thencxe South 00 degrees 07 minutes 05 seconds West, along the centerline of Gender Road, for a distance of 357.47 feet to the point of beginning.

Said property contains 0.5 acres, more or less, which includes 0.248 acres that is presently road occupied, leaving a net take of 0.252 acres.

the bearings of this description are based on the centerline of Gender Road as North 00 degrees 07 minutes 05 seconds East, from a description prepared by Ahlers, Moe & Associates of October 1996, calling from 'Centerline Plat of FRA-33-(26.21-30.12), all iron pipes are 3/4" ID with a cap bearing RII. This description prepared August of 2001.

C-STORE WITH FUELING CANOPY

PROPOSED STORE #490

880 WALNUT STREET
CANAL WINCHESTER, OHIO 43110

SHEET INDEX

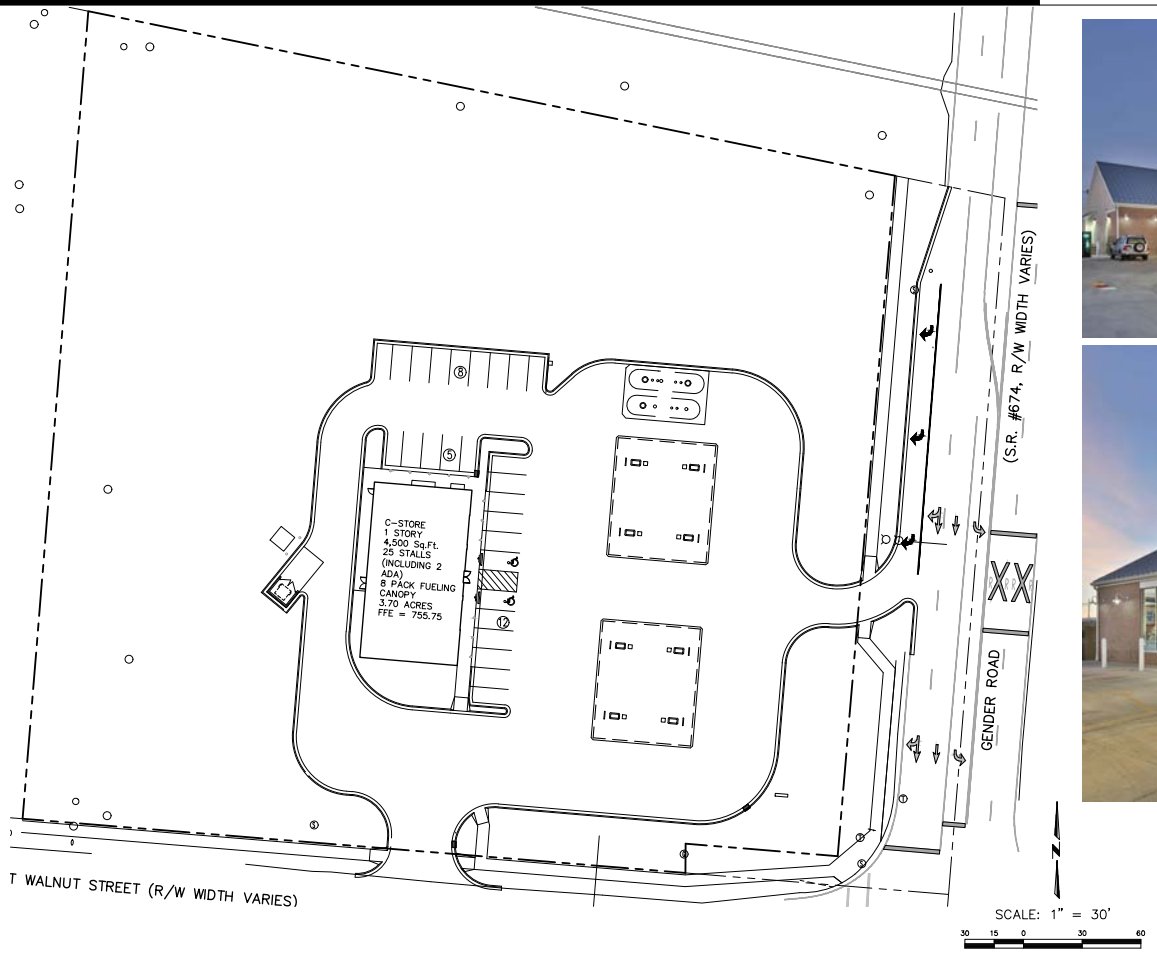
SITE PLAN SUBMITTAL – CITY OF CANAL WINCHESTER		
00	COVER SHEET	
01	EROSION CONTROL PLAN	
02	SITE PLAN	
03	ENGINEERING CONSTRUCTION PLAN	
04	DRAINAGE PLAN	
05	LANDSCAPE PLAN	
06	PHOTOMETRICS	
07	BUILDING ELEVATIONS	
08	FUEL CANOPY ELEVATIONS	
09	TRUCK PATH	

SUMMARY OF WORK

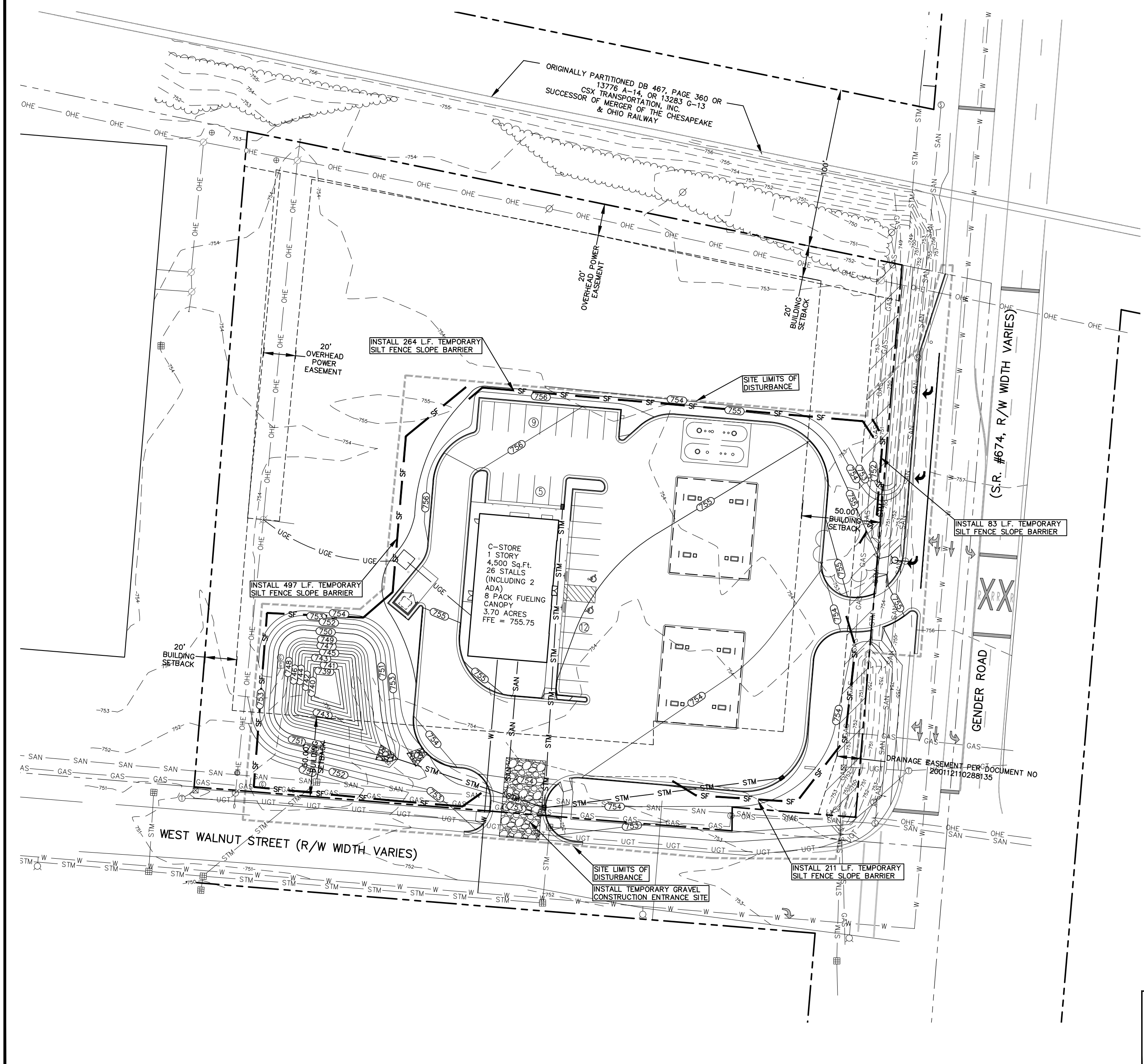
THIS DRAWING SET IS TO FULFILL THE SITE PLAN SUBMISSION REQUIREMENTS FOR THE CITY OF CANAL WINCHESTER. THIS CURRENT SITE IS ZONED LM (LIMITED MANUFACTURING) AND THE USE OF AUTOMOBILE SERVICE STATION WOULD BE A CONDITIONAL USE.

VICINITY MAP

SITE LOCATION MAP



THIS SITE PLAN IS FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION



EROSION CONTROL NOTES:

1. THE EROSION CONTROL FEATURES AND NOTES SHOWN ON THIS SHEET REPRESENT THE MINIMUM REQUIREMENTS ACCEPTABLE.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE ADDITIONAL CONTROL DEVICES AS REQUIRED DURING CONSTRUCTION TO PREVENT SOIL LOSS FROM THE SITE. IT SHALL ALSO BE EACH CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THEIR EROSION CONTROL FEATURES IN PROPER WORKING CONDITION UNTIL THE SITE IS STABILIZED BY PAVEMENT, VEGETATION, SOD OR OTHER GROUND STABILIZATION MEANS.
3. SILT FENCES SHALL BE PLACED ON A CONTOUR ELEVATION ALONG THE DOWNHILL SIDE AND FOR THE FULL EXTENT OF THE DISTURBED AREAS WITHIN THE CONSTRUCTION LIMITS. THE LAST TEN FEET ON EACH END OF RUN OF SILT FENCE SHALL BE PLACED FACING UPHILL AT 90 DEGREES TO THE CONTOUR LINE.
4. THE CONTRACTOR SHALL PREVENT SILT AND SEDIMENT FROM ENTERING NATURAL CHANNELS, WATER BODIES AND THE MUNICIPAL STORM SEWER SYSTEM.
5. WITHOUT ADVERSELY AFFECTING CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL: MINIMIZE THE AMOUNT OF SURFACE AREA WHICH IS EXPOSED AT ONE TIME, LEAVE GRADED AREAS WITH A ROUGH TEXTURE, CONSTRUCT TEMPORARY TERRACES DURING GRADING OPERATIONS, AND LIMIT UNNECESSARY VEHICLE TRAFFIC IN GRADED AREAS.
6. THE SPILLAGE OF DEBRIS, INCLUDING THE TRACKING OF SOIL OUTSIDE THE CONSTRUCTION LIMITS SHALL BE AVOIDED. THEREFORE, THE CONTRACTOR SHALL PROVIDE STABILIZED GRAVEL DRIVES AT ALL ACCESS LOCATIONS.
7. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR MARKING ALL LIMITS OF DISTURBANCE AND WILL NOT DISTURB VEGETATIVE COVER OUTSIDE OF THESE LIMITS.
8. SILT FENCE SHALL BE RELOCATED IMMEDIATELY DOWNSTREAM OF ANY ADDITIONAL GRADING OR TRENCHING REQUIRED TO COMPLETE WORK
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTATION, INSPECTION, AND MAINTENANCE OF ALL BEST MANAGEMENT PRACTICES (BMPs) AS SHOWN ON THE APPROVED STORMWATER POLLUTION PREVENTION PLAN (SWP3).
10. INSPECTION OF BMPs SHALL OCCUR AT LEAST ONCE PER WEEK AND WITHIN 24 HOURS AFTER A RAINFALL OF ONE HALF OF AN INCH OR MORE AS MEASURED AT THE SITE.
11. MAINTENANCE OF BMPs SHALL INCLUDE NECESSARY REPAIRS, REMOVAL OF SEDIMENT, AND ANY NECESSARY MODIFICATIONS TO BMPs AS DETERMINED BY THE CONTRACTOR, ENGINEER, OR AUTHORIZED CITY PERSONNEL.
12. TOPSOIL MUST BE STOCKPILED UPSTREAM OF SILT FENCE.
13. SEEDING, MULCHING AND FERTILIZING SHALL CONFORM WITH THE SPECIFICATIONS. SILT FENCE SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN STABILIZED BY MATURE VEGETATION.
14. UPON FINAL GRADING, ALL DISTURBED AREAS SHALL BE STABILIZED BY SEEDING AND MULCH WITHIN ONE WEEK. WHEN THIS OCCURS OUTSIDE THE STANDARD SPECIFICATION SEEDING DATES, SEED SHALL CONSIST OF A TEMPORARY COVER CROP OF ANNUAL RYE OR WHEAT. ALL SEEDED AREAS SHALL BE MULCHED PER STANDARD SPECIFICATIONS.
15. ALL PERIMETER SILT FENCE, EARTH DIKES, SEDIMENT BASINS, AND ROCK CONSTRUCTION ENTRANCES WILL BE INSTALLED BEFORE GRADING OPERATIONS BEGIN, EXCEPT THAT SILT FENCE WHICH IS TO BE PLACED ALONG THE BACK OF CURB FOR PROTECTION OF THE STREET. SILT FENCE AND EARTH DIKES THAT ARE PLACED BEFORE GRADING BEGINS WILL BE MAINTAINED BY THE GRADING CONTRACTOR UNTIL ALL UTILITIES ARE IN PLACE. THE SILT FENCE THAT IS PLACED ALONG THE BACK OF THE CURB OR RIGHT -OF-WAY WILL BE INSTALLED IMMEDIATELY AFTER THE CURB IS CONSTRUCTED.

CONSTRUCTION SEQUENCING:

1. PRECONSTRUCTION MEETING.
2. INSTALL ALL PERIMETER EROSION CONTROL MEASURES.
3. CLEAR AND GRUB SITE, COMPLETE ROUGH GRADING.
4. INSTALL GRAVEL CONSTRUCTION SITE ENTRANCES.
5. CONSTRUCT UTILITIES AND INSTALL TEMPORARY CURB INLET SEDIMENT BARRIERS.
6. CONSTRUCT SITE IMPROVEMENTS AND INSTALL LONG-TERM CURB INLET SEDIMENT BARRIERS.
7. CONSTRUCT BUILDINGS AND COMPLETE FINAL GRADING.
8. STABILIZE ALL DISTURBED AREAS AS SPECIFIED ON THE LANDSCAPE PLAN OR TO EXISTING CONDITIONS.
9. REMOVE ALL EROSION CONTROL MEASURES ONCE FINAL STABILIZATION IS ACHIEVED.

LEGEND:

- LIMITS OF DISTURBANCE
- SF — SILT FENCE SLOPE BARRIER
- GRAVEL CONSTRUCTION SITE ENTRANCE
- PROPERTY LINE

SCALE: 1" = 30'

THIS SITE PLAN IS FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

TREANORHL
1040 Vermont Street
Lawrence, Kansas
Office: 785.842.4858
Fax: 785.842.7536
www.TreanorHL.com

PROJECT OWNER
Certified
Certified Oil Company
949 King Ave. Columbus, Ohio 43212
(614)-421-7500 www.certifiedoil.com
Striving to be "The Most Customer Focused" convenience store chain in the industry

PROJECT CIVIL ENGINEER
TREANORHL, P.A.
MATTHEW L. MURPHY, P.E.
1040 VERMONT ST.
LAWRENCE, KS, 66044
(785) 842-4858

PROJECT CLIENT
CERTIFIED OIL COMPANY
SPM: JOHN DAMRATH
949 KING AVENUE
COLUMBUS, OHIO 43212
(614) 506-9435

PROJECT LOCATION
CERTIFIED OIL COMPANY STORE
STORE 490
C-STORE WITH 8 PACK CANOPY
880 W. WALNUT ST.
CANAL WINCHESTER, OH 43110
FRANKLIN COUNTY

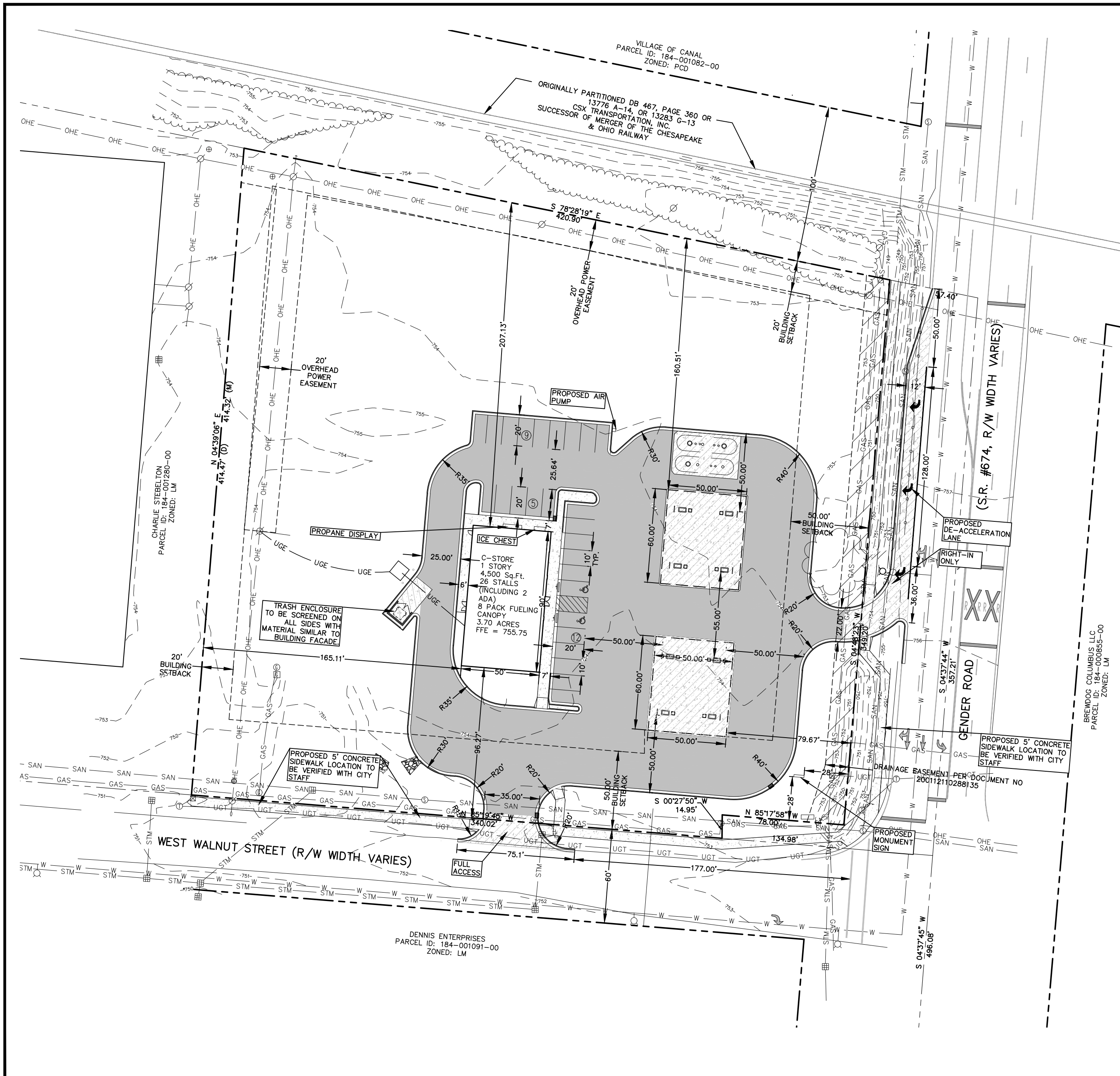
REV	DATE	DESCRIPTION
1	04/19/2017	CITY COMMENTS
2	05/22/2017	SITE PLAN & CONDITIONAL USE
3	06/23/2017	PER CITY COMMENTS

DATE: 04/17/2017
PROJECT NO.: CE17.001
DESIGNED BY: APB/MRS
DRAWN BY: APB/MRS
CHECKED BY: MLM

EROSION CONTROL PLAN

SHEET NO.
SHEET 1 OF 9

FILE PATH: O:\PSU_ARCH_cprescott.nt
OilSite Concepts\490 Gender Rd - Canal Winchester, OH\Drawings\Sheets\Planning\Sheet01- Site 490 Erosion Control Plan.dwg



BULK AREA REQUIREMENTS

LOCATION:	880 W. WALNUT ST. CANAL WINCHESTER, FRANKLIN COUNTY, OHIO	
ZONE:	LM (LIMITED MANUFACTURING)	
USE:	AUTOMOBILE CONVENIENCE MARKETS "CONDITIONAL"	
ITEM	REQUIREMENTS	PROVIDED
MINIMUM LOT AREA	NONE	N/A
MINIMUM LOT FRONTAGE	NONE	N/A
MINIMUM FRONT SETBACK	50'	80'
MINIMUM SIDE SETBACK	20' NORTH/50' SOUTH	160'North/50'South
MINIMUM REAR SETBACK	20'	165'
MAXIMUM BUILDING HEIGHT	40'	31'

GROUND COVER INFORMATION

ITEM	EXISTING	PROPOSED
IMPERVIOUS AREA	28,821 S.F./0.66 ACRES (18%)	57,371 S.F./1.32 ACRES (36%)
PERVIOUS AREA	132,481 S.F./3.04 ACRES (82%)	103,931 S.F./2.38 ACRES (64%)
TOTAL SITE AREA	161,302 S.F./3.70 ACRES (100%)	161,302 S.F./3.70 ACRES (100%)

SITE SUMMARY:

EXISTING ZONING:	LM
PROPOSED ZONING:	LM
TOTAL LAND AREA (S.F./AC.)	161,302 S.F./3.70 AC.
PROPOSED USE OR USES OF EACH BUILDING AND STRUCTURE	AUTOMOBILE CONVENIENCE MARKET
HEIGHT/NUMBER OF FLOORS	31' / (SINGLE STORY)
GROSS FLOOR AREA	4,500 S.F.
FLOOR AREA RATIO	1.76%
REQUIRED PARKING (2 SPACES REQ. PER PUMP)	16 SPACES
PROPOSED PARKING	26 SPACES

CURRENT OWNER
CONTACT PERSON: CHARLIE STEBELTON
6155 COONPATH RD.
CARROLL, OHIO 43112
(740) 756-4600

DEVELOPER
CERTIFIED OIL
CONTACT PERSON: JOHN DAMRATH
949 KING AVE.
COLUMBUS, OH 45212
(614) 506-9435

WEST PROPERTY OWNER
PARCEL ID: 184-001280-00
PARCEL ADDRESS: 880 W. WALNUT ST.
ZONED: LM
CHARLIE STEBELTON
6155 COONPATH RD.
CARROLL, OHIO 43112

SOUTH PROPERTY OWNER
PARCEL ID: 184-001091-00
PARCEL ADDRESS: 59 GENDER RD.
ZONED: LM
DENNIS ENTERPRISES
1797 SCIOTO POINTE DR.
COLUMBUS, OHIO 43221

EAST PROPERTY OWNER
PARCEL ID: 184-000855-00
PARCEL ADDRESS: 96 GENDER RD.
ZONED: LM
BREWDOG COLUMBUS LLC
STE. 1800
COLUMBUS, OHIO 43215

NORTH PROPERTY OWNER
PARCEL ID: 184-001082-00
PARCEL ADDRESS: 39 GENDER RD.
ZONED: PCD
VILLAGE OF CANAL
36 S HIGH ST
CANAL WINCHESTER, OH 43110

PAVEMENT LEGEND

- PROPOSED ASPHALT PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED REINFORCED CONCRETE PAVEMENT

SCALE: 1" = 30'

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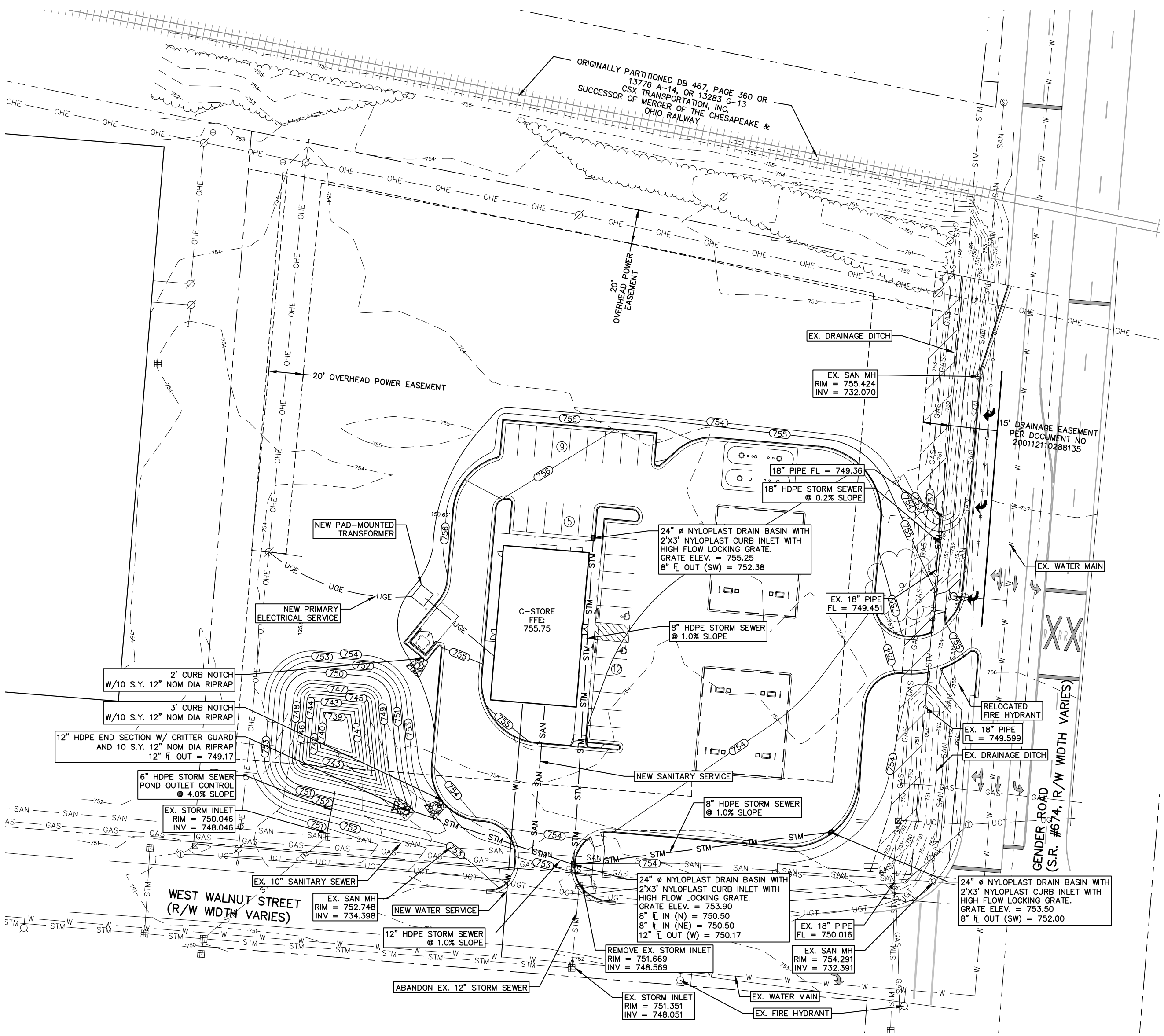
SITE LAYOUT PLAN
SHEET NO.
SHEET 2 OF 9

FILE PATH: O:\PSU_ARCH_cprescott.rvt
OilSite Concepts\490 Gender Rd - Canal Winchester, OH\Drawings\Sheets\Planning\Sheets\Site 490 Site Plan 06-15-17.dwg



LEGEND:

IRON PIN FOUND	∘	BURIED UTILITY LINES	UGE
IRON PIN SET	○	OVERHEAD UTILITY LINES	OHE
PIPE FOUND	⊙	GAS LINES	GAS
R.R. SPIKE SET	△	SANITARY SEWER	SAN
WATER VALVE		STORMWATER LINE	STM
GAS VALVE		WATER LINE	W
FIRE HYDRANT		PROPERTY LINE	
CATCH BASIN		SETBACK LINE	
GAS METER		ADJACENT PROPERTY LINE	
SANITARY MANHOLE		DRAIN PIPE	
AT&T MANHOLE		GUARD RAIL	
UTILITY POLE	⌀	BRUSH AREA	
UTILITY BOX	⊠	RAILROAD TRACKS	
TRAFFIC SIGNAL BOX		PROPOSED STORMWATER SEWER LINE	STM
TREE		PROPOSED WATER LINE	W
		PROPOSED SANITARY SEWER LINE	SAN
		PROPOSED UNDERGROUND ELECTRIC	UGE
		PROPOSED FIRE HYDRANT	

GRADING LEGEND:

— 750 — EXISTING CONTOUR
(750) PROPOSED CONTOUR

SCALE: 1" = 30'

30 15 0 30 60

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ENGINEERING CONSTRUCTION PLAN

SHEET NO.

SHEET 3 OF 9

DATE PRINTED: 12/18/2017 12:58:52 PM
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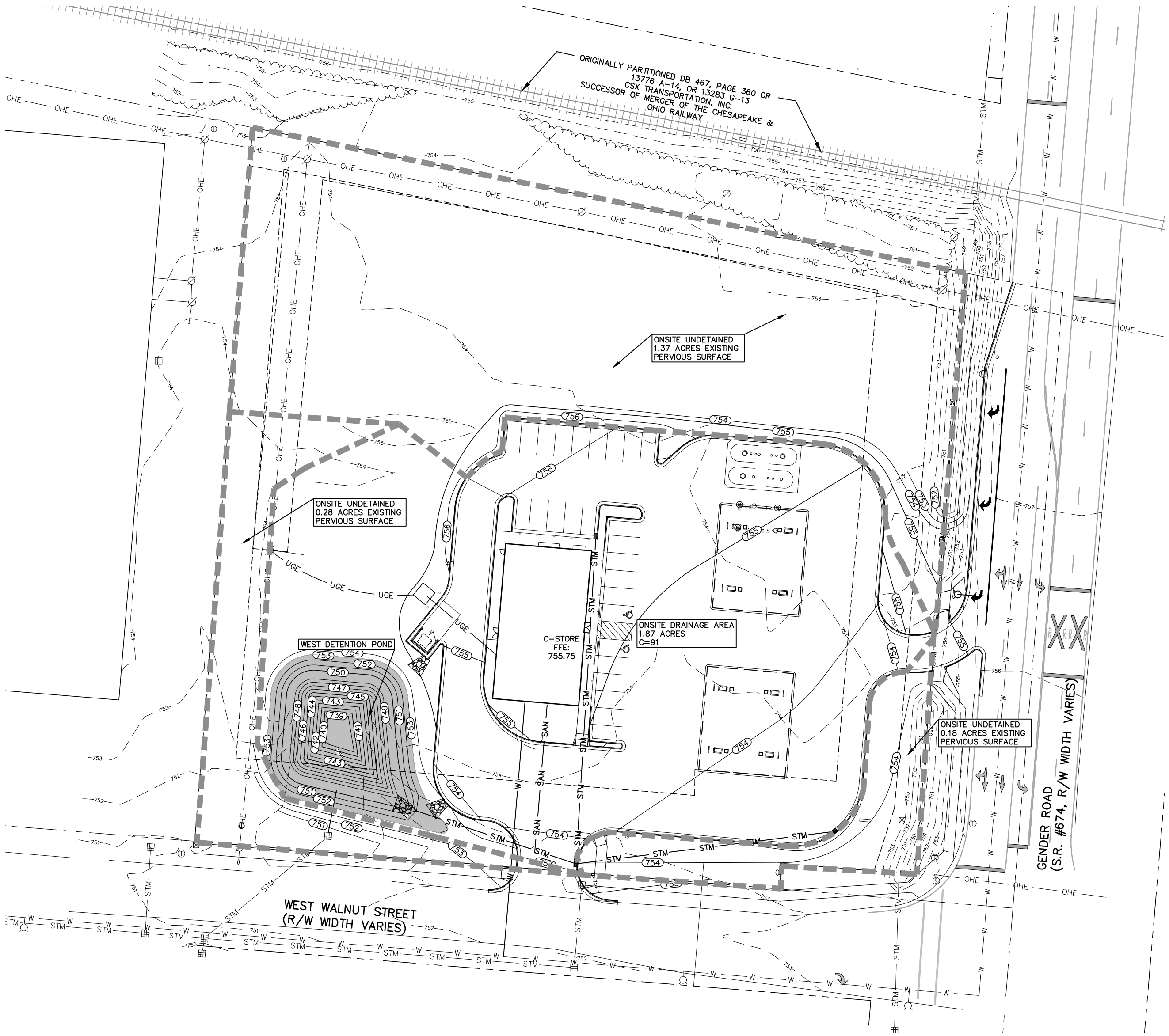

SITE HYDRAULICS SUMMARY:

TOTAL SITE AREA: 3.70 ACRES
EXISTING SITE IMPERVIOUS COVER: 18%
PROPOSED SITE IMPERVIOUS COVER: 36%

STORM EVENT	EXISTING PEAK SITE RUNOFF
1-YEAR	4.27 CFS
2-YEAR	6.12 CFS
5-YEAR	8.88 CFS
10-YEAR	11.30 CFS
25-YEAR	14.88 CFS
50-YEAR	17.91 CFS
100-YEAR	21.13 CFS

DETENTION HYDRAULICS SUMMARY:

WEST DETENTION POND:
STORAGE VOLUME = 40,103 CUBIC FEET
STORAGE VOLUME ABOVE NORMAL POOL = 26,584 CUBIC FEET
NORMAL POOL ELEVATION = 749.00
100 YEAR FLOOD ELEVATION = 752.40
TOP OF POND ELEVATION = 754.00
FREE BOARD STORAGE DEPTH = 1.60 FEET

STORM EVENT	WEST POND RELEASE RATE
1-YEAR	0.00 CFS
2-YEAR	0.05 CFS
5-YEAR	0.16 CFS
10-YEAR	0.34 CFS
25-YEAR	0.64 CFS
50-YEAR	0.85 CFS
100-YEAR	0.93 CFS

SCALE: 1" = 30'

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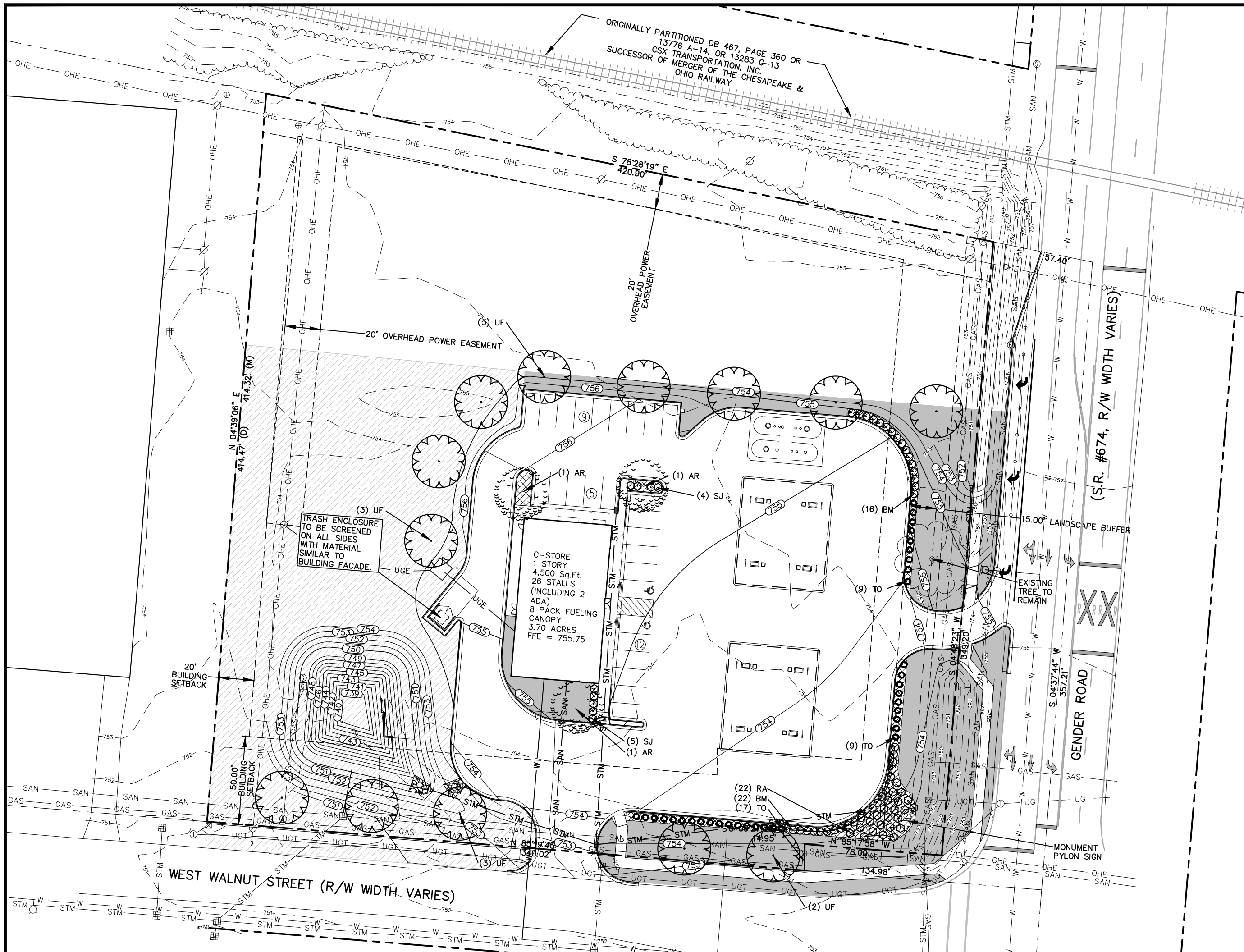
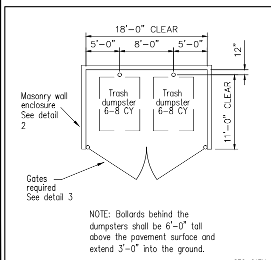
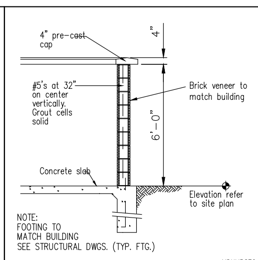
DRAINAGE PLAN

FILE PATH: O:\PSU_ARCH_cprescott.rvt
OilSite Concepts\490 Gender Rd - Canal Winchester, OH\Drawings\Sheets\Planning\Sheet\4- Site 490 Drainage Plan.dwg

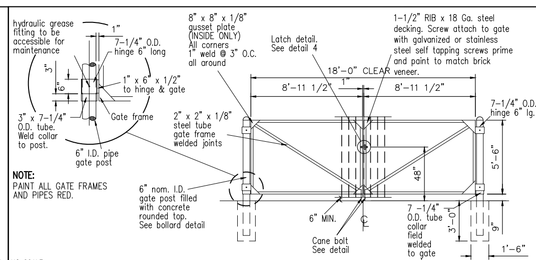




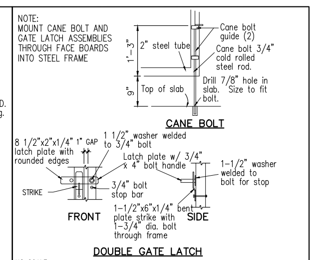
1 DUMPSTER LAYOUT



2 DUMPSTER SECTION



3 GATE DETAIL FOR DUMPSTER ENCLOSURE



4 GATE LATCH / BOLT DETAILS

PLANT SCHEDULE

SYMBOL	KEY	QTY.	NAME	SIZE	COND.
		16	SHADE TREE		
	UF	13	FRONTIER ELM – ULMUS X FRONTIER	4" CAL MIN.	B&B
	AR	3	PACIFIC SUNSET MAPLE – ACER RUBRUM 'PACIFIC SUNSET'	4" CAL MIN.	B&B
		104	DECIDUOUS & EVERGREEN SHRUBS		
	SJ	9	GOLDMOUND SPIREA – SPIRAEA JAPONICA 'GOLDMOUND'	2 GAL.	3' O.C.
	RA	22	GRO-LOW FRAGRANT SUMAC – RHUS AROMATICA 'GRO-LOW'	2 GAL.	6' O.C.
	BM	38	WINTER GEM BOXWOOD – BUXUS MICROPHYLLA JAPONICA 'WINTER GEM'	2 GAL.	4' O.C.
	TO	35	THUJA OCCIDENTALIS 'WOODWARDII' – WOODWARD ARBORVITAE	2 GAL.	5' O.C.
		2,713 S.F.	DOUBLE SHREDDED HARDWOOD MULCH (3" LAYER MIN.)	N/A	N/A
		14,900 S.F.	TURF TYPE FESCUE (SOD)	SOD	N/A
		35,280 S.F.	TURF TYPE FESCUE (HYDRO-SEED)	N/A	N/A

NON-RESIDENTIAL LANDSCAPE & SCREENING SUMMARY

SHADE TREES REQUIRED: — *PROVIDED:*

NON-RESIDENTIAL USES LANDSCAPE-
ONE (1) TREE / 1,000 SQUARE FEET OF BUILDING GROUND COVERAGE =
TOTAL BUILDING COVERAGE WITH FUEL CANOPY-
10,943 S.F.= 11 TREES REQUIRED — *11 TREES*

OFF-STREET PARKING AREAS LANDSCAPE
ONE (1) TREE / SIX (6) PARKING SPACES-
TOTAL PARKING PROVIDED-
26 STALLS = 5 TREES REQUIRED — *5 TREES*

TOTAL REQUIRED= 16 TREES — *16 TREES*

INTERIOR PARKING LANDSCAPE SUMMARY

NON-RESIDENTIAL USES LANDSCAPE REQUIREMENT
REQUIRED: — *PROVIDED:*
THIRTY (30) SQUARE FEET OF LANDSCAPED AREA FOR EVERY 1,000 SQUARE FEET OF BUILDING GROUND COVERAGE=
TOTAL BUILDING COVERAGE WITH FUEL CANOPY-
10,943 S.F. = 329 S.F. LANDSCAPED AREA — *500 S.F.*

PARKING SPACES ABOUT THE MAXIMUM REQUIREMENT
REQUIRED: — *PROVIDED:*
AN ADDITIONAL SIXTY (60) SQUARE FEET OF LANDSCAPED AREA FOR EVERY ONE (1) ADDITIONAL PARKING SPACE=
TOTAL PARKING ALLOWED- 16 SPACES
TOTAL PARKING PROVIDED- 26 SPACES =
10 ADDITIONAL SPACES PROVIDED
10 SPACES = 600 S.F. LANDSCAPE AREA — *624 S.F.*

TOTAL REQUIRED= 929 S.F. — *1,124 S.F.*

SIGNAGE LANDSCAPE REQUIREMENT
REQUIRED: — *PROVIDED:*
AN AREA TOTALING A MINIMUM OF FIFTY (50) SQUARE FEET SHALL BE PROVIDED CENTERED ON THE BASE OF ALL FREESTANDING SIGNS=
TOTAL SIGNS PROVIDED-
1 SIGN = 50 S.F. LANDSCAPE AREA — *100 S.F.*

PUBLIC RIGHT-OF-WAY SCREENING REQUIREMENT

REQUIRED:
OFF-STREET PARKING AREAS MORE THAN FIVE (5) VEHICLES SHALL BE EFFECTIVELY SCREENED ON EACH SIDE WHICH ABUTS A RESIDENTIAL ZONING DISTRICT OR PUBLIC RIGHT-OF-WAY BY A MASONRY WALL OR SOLID WOOD FENCE. SUCH WALL OR FENCE SHOULD BE NO HIGHER THAN FOUR (4) FEET AND SHALL BE MAINTAINED IN GOOD CONDITION. LANDSCAPING PROVIDED IN LIEU OF SUCH WALL OR FENCE SHALL CONSIST OF A STRIP OF LAND NOT LESS THAN FIFTEEN (15) FEET IN WIDTH PLANTED WITH AN EVERGREEN HEDGE OR DENSE PLANTING OF EVERGREEN SHRUBS NOT LESS THAN FOUR (4) FEET IN HEIGHT.
TOTAL R.O.W LENGTH = GENDER RD- 189 L.F.
W. WALNUT ST- 219 L.F.
=408 L.F. LANDSCAPE HEDGE — *408 L.F.*

LANDSCAPE LEGEND

- PROPOSED MULCH
- PROPOSED TURF GRASS
- PROPOSED HYDRO-SEED

SCALE: 1" = 30'

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STATE OF OHIO MATTHEW L. MURPHY REGISTERED PROFESSIONAL ENGINEER

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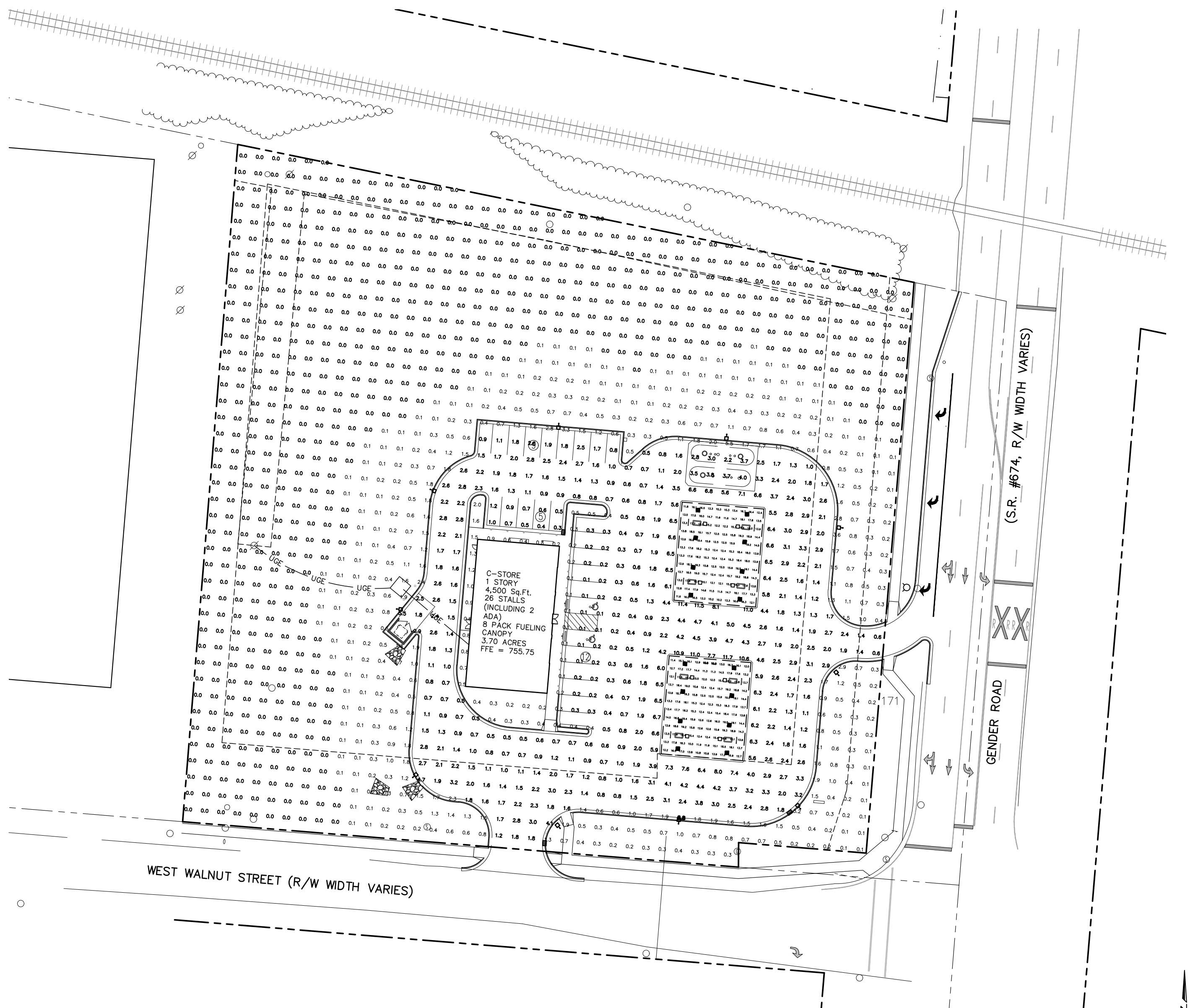
LANDSCAPE PLAN
SHEET NO.



SCALE: 1" = 30'

30 15 0 30 60

PAVED SURFACE READINGS

Average	2.4
Maximum	12.2
Minimum	0.1
Avg:Min	23.79
Max:Min	122.00

UNDEFINED AREA

Average	0.2
Maximum	6.8
Minimum	0.0
Avg:Min	N/A
Max:Min	N/A

UNDER GAS CANOPY

Average	15.3
Maximum	19.6
Minimum	10.0
Avg:Min	1.53
Max:Min	1.96

PROPERTY LINE READINGS

Average	0.1
Maximum	0.8
Minimum	0.0
Avg:Min	N/A
Max:Min	N/A

■ CLED-LL-7-UNV-S-5-WH
candela file 'CLED-LL-7-UNV-S-5-WH.ies'
1 lamp(s) per luminaire, 8714 initial lumens per lamp
Light Loss Factor = 1.000, watts per luminaire = 66
mounting height= 16 ft
number locations= 16, number luminaires= 16
kw all locations= 1.1

-□ VP-S-30NB-70-5K-UNV-T4
candela file 'VP-S-30NB-70-T4.ies'
1 lamp(s) per luminaire, photometry is absolute
Light Loss Factor = 1.000, watts per luminaire = 71
Outreach (from mounting axis to photometric center)= 30 in
mounting height= 18 ft
number locations= 10, number luminaires= 10
kw all locations= 0.7

1. THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS TO SECURITY LIGHTING SYSTEMS. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

THIS LAYOUT MAY NOT MEET TITLE 24 OR LOCAL ENERGY REQUIREMENTS. IF THIS LAYOUT NEEDS TO BE TITLE 24 COMPLIANT OR MEET OTHER ENERGY REQUIREMENTS, PLEASE CONSULT FACTORY WITH SPECIFIC DETAILS REGARDING PROJECT REQUIREMENTS SO THAT REVISIONS MAY BE MADE TO THE DRAWING.

THIS LIGHTING PATTERN REPRESENTS ILLUMINATION LEVELS CALULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH ILLUMINATING ENGINEERING SOCIETY APPROVED METHODS. ACTUAL PERFORMANCE OF ANY MANUFACTURER'S LUMINAIRES MAY VARY DUE TO VARIATION IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, AND OTHER VARIABLE FIELD CONDITIONS.

SECURITY LIGHTING™
2100 Golf Road, Suite 460, Rolling Meadows, IL 60008
1-800-544-4848

WHITEWAY

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PHOTOMETRIC PLAN

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SHEET 6 OF 9

DATE PRINTED: 12/18/2013 12:58:02 PM
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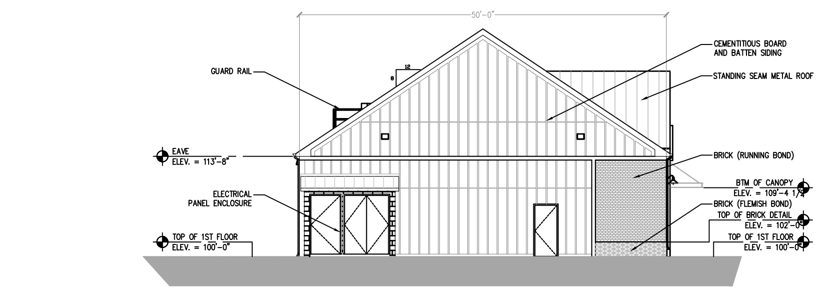
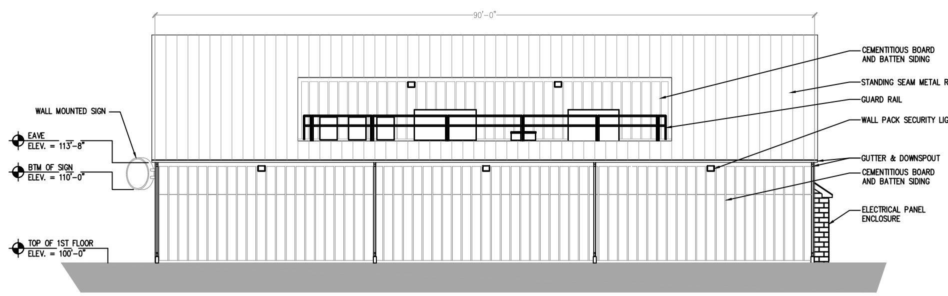


South Elevation **D1**
1/8"=1'-0"



West Elevation **C1**
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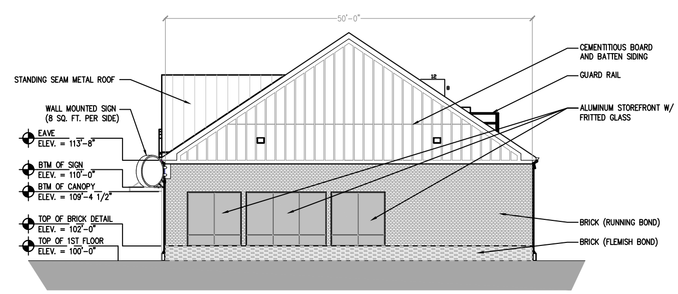


North Elevation **B1**
1/8"=1'-0"

East Elevation **A1**
1/8"=1'-0"

TREANORHL
1040 Vermont Street
Lawrence, Kansas
Office: 785.842.4858
Fax: 785.842.7536
www.TreanorHL.com

PROJECT OWNER
Certified
Certified Oil Company
949 King Ave. Columbus, Ohio 43212
(614)-421-7500 www.certifiedoil.com
Striving to be "The Most Customer Focused" convenience store chain in the industry

PROJECT CIVIL ENGINEER
TREANOHL, P.A.
MATTHEW L. MURPHY, P.E.
1040 VERMONT ST.
LAWRENCE, KS, 66044
(785) 842-4858

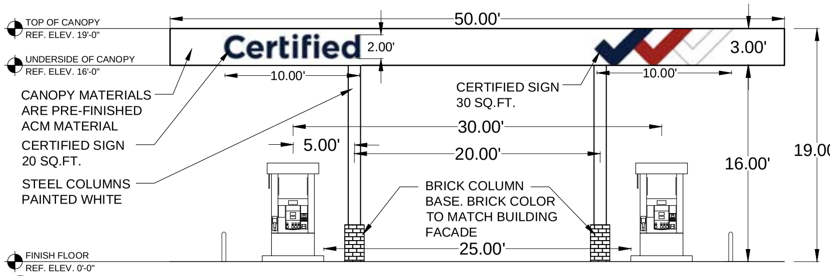
PROJECT CLIENT
CERTIFIED OIL COMPANY
SPM: JOHN DAMRATH
949 KING AVENUE
COLUMBUS, OHIO 43212
(614) 506-9435

PROJECT LOCATION
CERTIFIED OIL COMPANY STORE
STORE 490
C-STORE WITH 8 PACK CANOPY
880 W. WALNUT ST.
CANAL WINCHESTER, OH 43110
FRANKLIN COUNTY

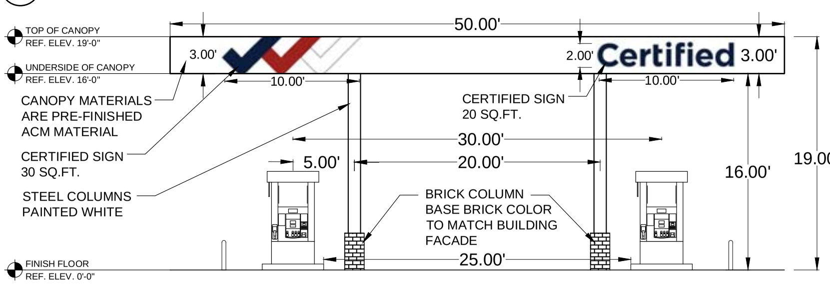
REV	DATE	DESCRIPTION
1	04/19/2017	CITY COMMENTS
2	05/22/2017	SITE PLAN & CONDITIONAL USE
3	06/23/2017	PER CITY COMMENTS

DATE: 04/17/2017
PROJECT NO.: CE17.001
DESIGNED BY: APB/MRS
DRAWN BY: APB/MRS
CHECKED BY: MLM

BUILDING ELEVATIONS
SHEET NO.
SHEET 7 OF 9



NORTH ELEVATION
NOT TO SCALE



SOUTH ELEVATION
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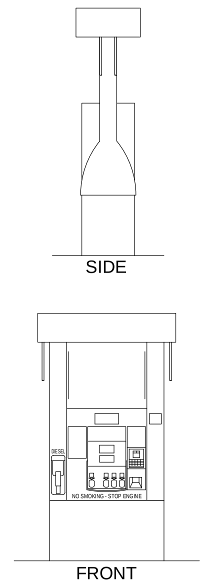
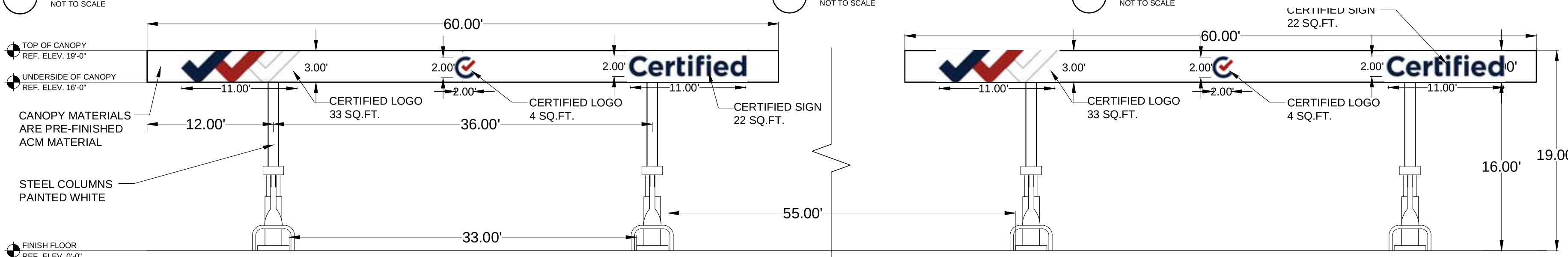


DISPENSER ELEVATIONS
NOT TO SCALE

MONUMENT SIGN ELEVATIONS
NOT TO SCALE



EAST ELEVATION
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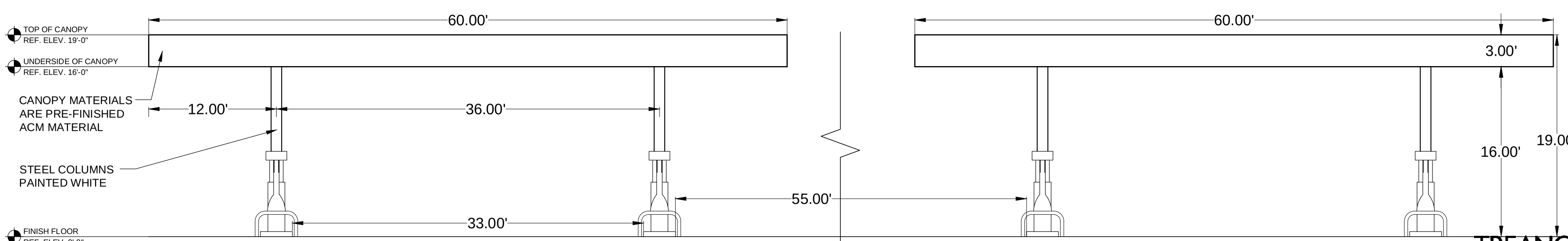

WEST ELEVATION
NOT TO SCALE

TREANORHL
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COLUMBUS, OHIO 43212
(614) 506-9435

PROJECT LOCATION
CERTIFIED OIL COMPANY STORE
STORE 490
C-STORE WITH 8 PACK CANOPY
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CANAL WINCHESTER, OH 43110
FRANKLIN COUNTY

REV	DATE	DESCRIPTION
1	04/19/2017	CITY COMMENTS
2	05/22/2017	SITE PLAN & CONDITIONAL USE
3	06/23/2017	PER CITY COMMENTS

STATE OF OHIO MATTHEW L. MURPHY PROFESSIONAL ENGINEER

DATE: 04/17/2017
PROJECT NO.: CE17.001
DESIGNED BY: APB/MRS
DRAWN BY: APB/MRS
CHECKED BY: MLM

CANOPY ELEVATIONS
SHEET NO.
SHEET 8 OF 9

DATE PRINTED: 12/18/2013 12:58:02 PM
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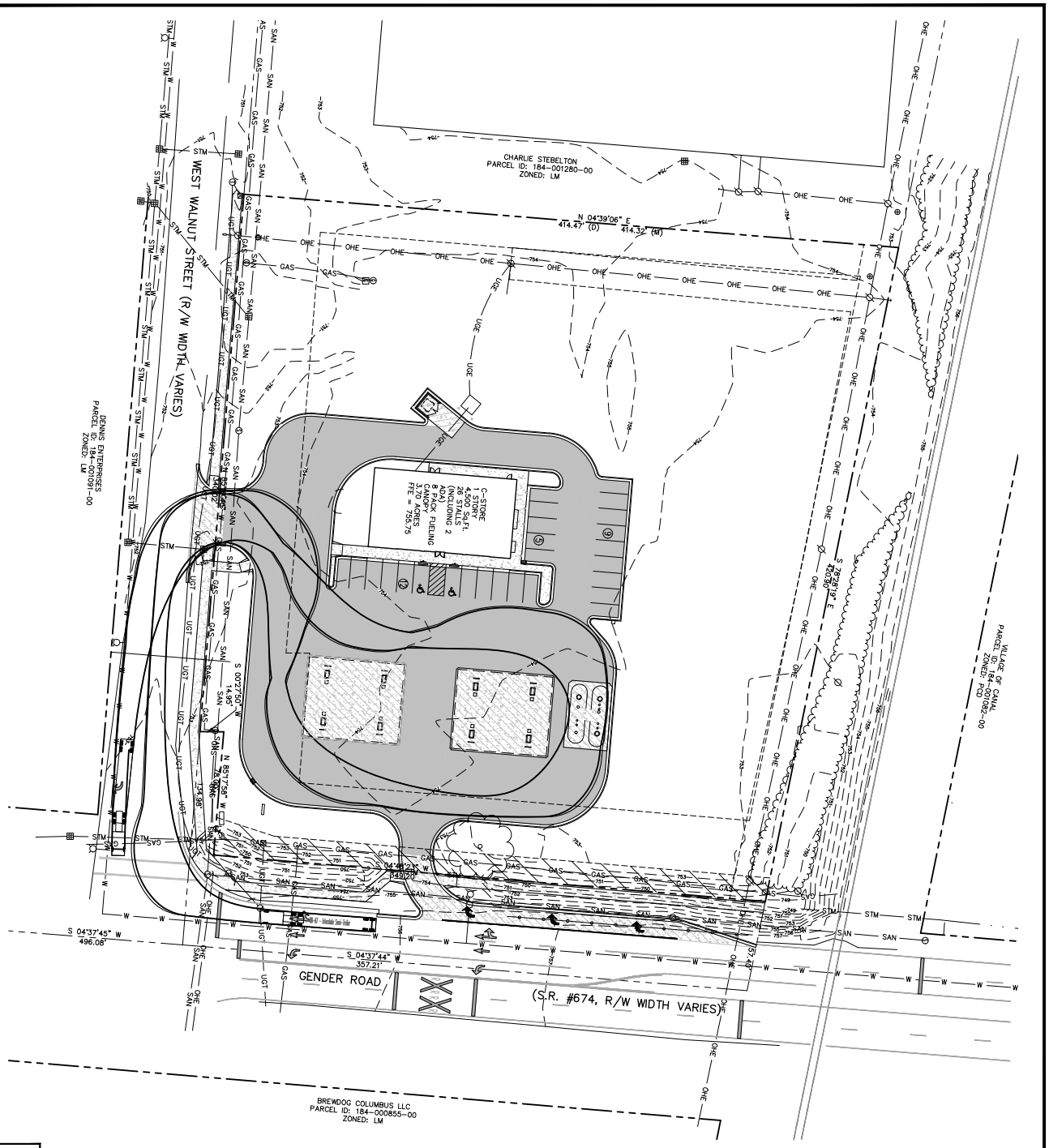

THIS SITE PLAN IS FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

SCALE: 1" = 30'

TREANORHL
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Lawrence, Kansas 66047
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Fx: 785.842.7536
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REV.	DATE	DESCRIPTION
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3	06/23/2017	PER CITY COMMENTS

DATE: 04/17/2017
PROJECT NO.: CE17.001
DESIGNED BY: APB/MRS
DRAWN BY: APB/MRS
CHECKED BY: MLM

TRUCK ROUTE

SHEET NO.
SHEET 9 OF 9

PROJECT LOCATION
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STORE 490
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CANAL WINCHESTER, OH 43110
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ALTA/ACSM Land Title Survey

Part of Section #25
Township #11, Range #21
Township of Madison
Village of Canal Winchester
County of Franklin
State of Ohio

Legal Description:

Situated in the State of Ohio, County of Franklin, and in the City of Canal Winchester:

Being located in the Northwest Quarter of Section 25, Township 11, Range 21, Congress Lands and being 4.208 acres out of that tract of land as conveyed to Lloyd E. Stebelton, by deed of record in Deed Book 3204, Page 239, all references being to records of the Recorder's Office, Franklin County, Ohio, and being more particularly bounded and described as follows:

Beginning at a point in the centerline of Gender Road, at the northeasterly end of West Walnut Street. said point being located North 4°14'00" East, a distance of 30.00 feet from a railroad spike at the centerline intersection of said West Walnut Street and Gender Road, thence North 85°45'00" West with the northerly line of said West Walnut Street, a distance of 475.00 feet to an iron pin; thence North 4°15'00" East ,a distance of 414.47 feet to an iron pin in the southerly right of way line of the C. & O. Railroad; thence South 78°54'19" East, with the southerly right of way line of said C. & O. Railroad, a distance of 478.30 feet to a point in the centerline of said Gender Road; thence South 4°14'00" West, with the centerline of said Gender Road, a distance of 357.47 feet to the place of beginning, containing 4.208 acres of land, more or less.

LESS AND EXCEPTING therefrom the following 0.5 acre tract as conveyed by Robert L Stebelton and Harold L. Stebelton to Village of Canal Winchester by document recorded on December 11, 2001 of record in Instrument No. 200112110288135.

Situated in the State of Ohio, County of Franklin, Madison Township, Village of Canal Winchester, and is part of the Northwest Quarter of Section #25, Township 11 North, Range 21, Congress Lands, and is apart of a 4.208 acre tract conveyed to Robert L. Stebelton, and Harold L. Stebelton as described in OR 037521109, Franklin County Recorder's office, and is more praticulary described as follows

Commencing at Franklin County Monument Number 4452 at Centerline Station 91+52.00, the southeast corner of said northwest quarter, in the centerline of Gender Road (State Route 674);

Thence North 00 degrees 07 minutes 05 seconds East, along said centerline, for a distance of 495.60 feet, passing a railroad spike found at 465.60 feet, to the point of beginning of the following take (Centerline Station 96 +47.40);

Thence North 89 degrees 50 minutes 41 seconds West, 134.98 feet to an iron pipe set in the northerly right of way line of West Walnut Street, (Centerline Station 96+47.69, 135 feet left);

Thence North 00 degrees 02 minutes 35 seconds East, 14.95 feet to an iron pipe set (Centerline Station 96 +62.64, 135 feet left);

Thence South 89 degrees 52 minutes 55 seconds East, 78.00 feet to an iron pipe set (Centerline Station 96 +62.62, 57 feet left);

Thence North 00 degrees 07 minutes 05 seconds East, 349.20 feet to an iron pipe set on the south line of the C&O Railroad (Centerline Station 100+11.95, 57 feet left);

Thence South 83 degrees 06 minutes 07 seconds East, 57.40 feet to a mag nail set on the centerline of Gender Road (Centerline Station 100+05.07);

Thencze South 00 degrees 07 minutes 05 seconds West, along the centerline of Gender Road, for a distance of 357.47 feet to the point of beginning.

Said property contains 0.5 acres, more or less, which includes 0.248 acres that is presently road occupied, leaving a net take of 0.252 acres.

the bearings of this description are based on the centerline of Gender Road as North 00 degrees 07 minutes 05 seconds East, from a description prepared by Ahlers, Moo & Associates of October 1996, calling from "Centerline Plat of FRA-33-(26.21-30.12), all iron pipes are 3/4" ID with a cap bearing RII. This description prepared August of 2001.

Location Map

Lands Surveyed:

Robert L. Stebelton and Harold L. Stebelton
Deed Book 3752, Page 864
Official Record 37521109
Tax ID 184-001287-00
870 W. Walnut Street
Canal Winchester, OH 43110

Schedule B, Part II

9. Easement Granted to Ohio-Midland Light and Power Company, of Record in Deed Book #1638, Page #375 Franklin County Records, Gives said Company the Right, Priviledge, Permission, and Consent to Construct, Operate, and Maintain a Line for the Transmission and/or Distribution of Electric Energy.

10. Right of Way Easement Granted to Columbia Gas of Ohio, inc., of Record in Deed Book # 2960, Page #367 Franklin County Records, For the Construction of a Gas Pipe Line Not to Exceed a Distance of 5 feet West of the West Right Of Way Line of Gender Road and Not to Exceed a Distance of 5 feet North of the North Right of Way of Walnut Street.

11. Easement Granted to the South Central Power Company, Recorded in Deed Book #3442, Page #612, Franklin County Records, Being a Strip of Land 20 Feet Wide Along the North and East side of the Property as Referenced on Map 110, Block 3, to Construct, Reconstruct, Rephase, Relocate, Repair, Extend, Operate, and Maintain On, Over, Across, Under and Through Said Property for Electrication, Telephone, or Other Utility Purpose

12. Easement For Purposes of a Water Line, Granted to the Village of Canal Winchester, Recorded in Deed Book #3764, Page #125, Franklin County Records, Does Not Apply to This Property.

13. Easements, Restrictions and Conditions as Set Out in Agreed Judgment Entry Recorded December 11, 2001 as Instrument No. 200112110288135, Franklin County Records, Adressess the Drainage and Axess of Gender Road Along the West Property Line.

Zoning

Property is Zoned LM (Limited Manufacturing)
Front Set Back 50' From Road R/W
Sides and Rear Set Back 20'
Building Height Limit of 40'

Flood Zone Certification

Described property is in Zone X as indicated by the Federal Emergency Management Agency's National Flood Insurance Program Panel # 39049C0452K, Effective Date of June 17, 2008

Certification

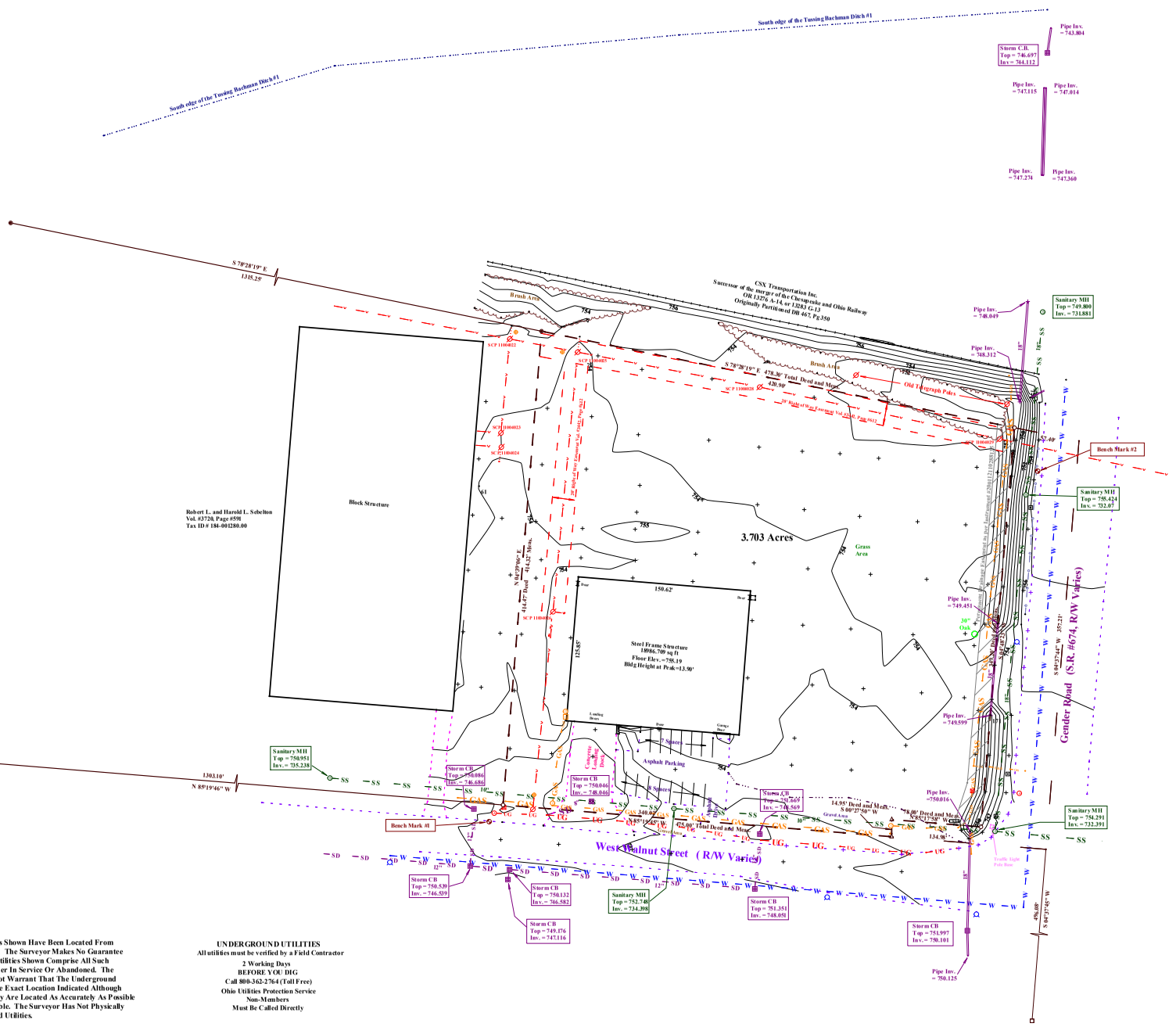
To Certified Oil Company, an Ohio corporation, Fidelity National Title Guaranty Company
This is to certify that this map or plat and the survey on which it is based were made in accordance with "Minimum Standard Detail Requirements for ALTA/ASCM Land Title Surveys," jointly established and adopted by ALTA and NSPS in 2016, and includes Items 1, 2, 3, 4, 5, 6.(a)(b), 7.(a), 7.(b)(1), 8, 9, 11, 13, 14, 16, 17, 18, and 21 of Table A thereof. Pursuant to the Accuracy Standards as adopted by ALTA and NSPS and in effect on the date on this certification, undersigned further certifies that in my professional opinion, as a land surveyor registered in the State of Ohio, and the Relative Positional Accuracy of this survey does not exceed that which is specified therein.

Date: _____ _____ (SEAL)
Keith A. Chamberlin P.S. 6744

Alta Survey For: Certified Oil Company

Date: March 6, 2017	*Project#: 17-03.2552*	*Drawn By: S.D.*

Chamberlin Surveying
Email: 6744kac@sbcglobal.net *761 E. Park Ave. Suite A*
Phone: 330-482-9578 *Columbiana, OH 44408*



Underground Utilities:

The Underground Utilities Shown Have Been Located From Field Survey Information. The Surveyor Makes No Guarantee That The Underground Utilities Shown Comprise All Such Utilities In The Area, Either In Service Or Abandoned. The Surveyor Further Does Not Warrant That The Underground Utilities Shown Are In The Exact Location Indicated Although He Does Certify That They Are Located As Accurately As Possible From Information Available. The Surveyor Has Not Physically Located The Underground Utilities.

UNDERGROUND UTILITIES
All utilities must be verified by a Field Contractor
2 Working Days
BEFORE YOU DIG
Call 800-362-2764 (Toll Free)
Ohio Utilities Protection Service
Non-Members
Must Be Called Directly

Basis of Bearing:

Survey Map Bearings and Elevations are Based on State Plane Grid South, NAD 83 (2011) Elevations are NAVD 88. Tied by GPS to O.D.O.T. VRS

Benchmarks:

Benchmark #1: 1" Survey Spike in the Edge of the road
N = 673,314.975
E = 1,875,667.885
Elev. = 751.325

Benchmark #2: 1" Survey Spike in the Northern Most Wood Guard Rail Post
N = 673, 620.495
E = 1,876, 146.192
Elev. = 757.581

Contour Interals = 1'

Alta Survey For: Certified Oil Company

Date: March 6, 2017	*Project#: 17-03.2552*	*Drawn By: S.D.*

Chamberlin Surveying
Email: 6744ac@sbcglobal.net *761 E. Park Ave. Suite A*
Phone: 330-482-9578 *Columbiana, OH 44408*

Page #2 0f 2

June 22, 2017

Lucas Haire
City of Canal Winchester
Development Director
36 S. High Street
Canal Winchester, OH 43110

RE: RESULTS OF THE TRAFFIC IMPACT STUDY FOR THE PROPOSED CERTIFIED OIL DEVELOPMENT ON GENDER ROAD AT WALNUT STREET

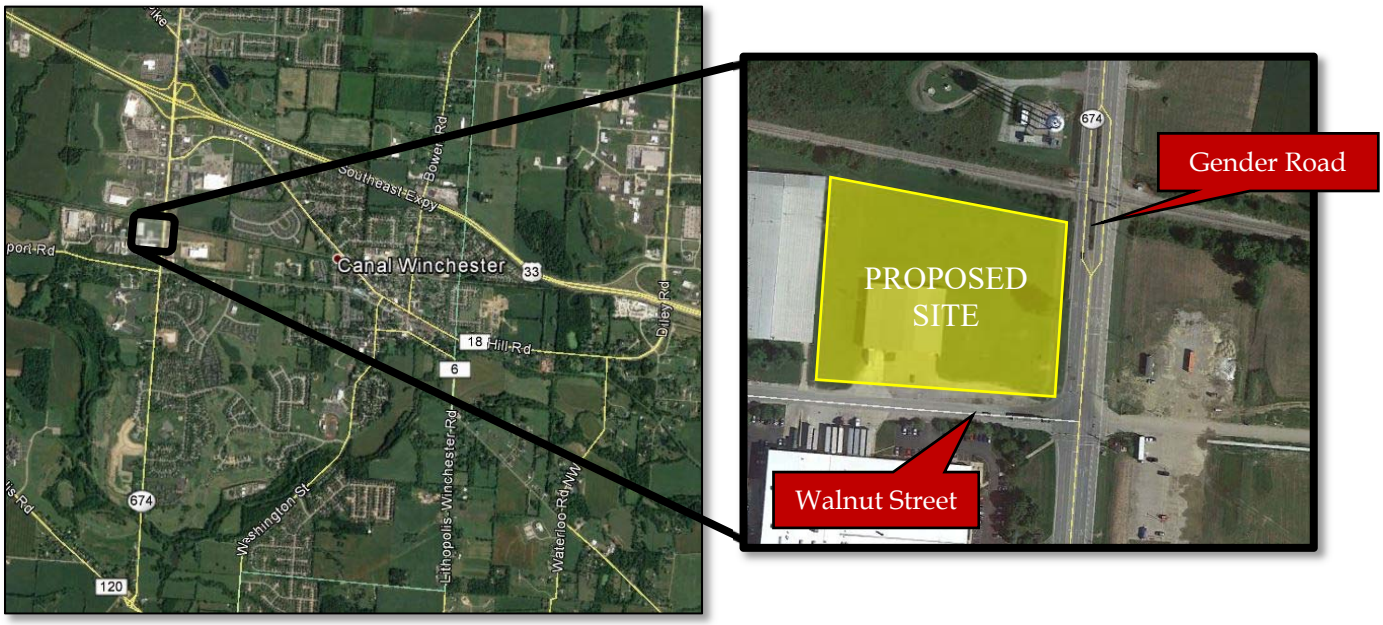
Mr. Haire:

A traffic impact study was conducted for the proposed Certified Oil development along Gender Road at Walnut Street. The results of this analysis are summarized below.

Background

Carpenter Marty Transportation was retained to conduct a traffic impact study for the proposed Certified Oil development. The proposed site is located on the northwest corner of the Gender Road and Walnut Street intersection and can be seen in Figure 1.

Figure 1 – Location of Proposed Site (Yellow Shading)



The development is proposed to consist of a 4,439 SF convenience store with 16 vehicle fueling positions and is expected to begin generating traffic in 2017. There is one proposed right-in drive along Gender Road along with a proposed full-access drive to Walnut Street. A draft of the site plan can be found in Attachment A.

Projected Traffic and Trip Generation

In order to conduct the required analysis for the proposed site, Opening Year (2017) and Horizon Year (2027) volumes were developed. Peak hour turning movement counts were collected at the Gender Road and Walnut Street intersection in March of 2017 by Carpenter Marty Transportation. Recent studies to facilitate public roadway improvements along Gender Road have used growth rates between 1.0% and 1.5%. The ODOT Traffic Count Database System (TCDS) was used to acquire historical Average Annual Daily Traffic (AADT) volumes for Gender Road at Walnut Street. From these volumes, it was determined that growth for this area is cyclical, but has been negative recently. Per the instruction of the City of Canal Winchester's Consulting Engineer, a 1.0% growth rate was used to produce more conservative results. Traffic counts were completed before full operation of the BrewDog facility was commenced. Therefore, background traffic entering and exiting the east leg of the intersection where grown by 5% to account for full operation of the restaurant/bar. No Build and Build scenarios were analyzed to determine the impact of the site development. Site traffic was added to the background traffic to produce Build traffic. The count data and TCDS information can be found in Attachment B.

Trips for the development were generated using standard Institute of Transportation Engineers (ITE) practices and the *Trip Generation Manual*, 9th edition, data via the OTISS program[1]. Traffic was generated using ITE Land Use Code (LUC) *945 – Gasoline/Service Station With Convenience Market*. Pass-by trips were applied per standard ITE practices for the land use. Table 1 shows the site traffic generated for the development.

Table 1 – Proposed Site Trip Generation Summary

Land Use	Size	AM Peak		PM Peak	
		Entry	Exit	Entry	Exit
945 - Gasoline/Service Station with Convenience Market		82	81	108	108
Pass-By		28	27	37	36

[1] Online Traffic Impact Study Software developed by ITE and Transoft Solutions.

Non-Pass-By	16 Fueling Positions	54	54	71	72

In addition to the *Gasoline/Service Station with Convenience Market*, trips were generated for the proposed BrewDog Hotel to be located on the east leg of the intersection of Gender Road and Walnut Street, as instructed by the City of Canal Winchester's Consulting Engineer. Trips for the proposed future hotel were generated assuming a 50-room hotel with ITE Land Use Code *310 - Hotel.* Table 2 shows the site traffic produced for the hotel.

Table 2 – Proposed Site Trip Generation Summary

Land Use	Size	AM Peak		PM Peak	
		Entry	Exit	Entry	Exit
310 – Hotel	50 Rooms	15	11	15	15

Trips were distributed based on the average of AM and PM volumes entering and exiting the study area, knowledge of the surrounding area, and engineering judgment. This led to the following general distribution:

- 49% to/from the north along Gender Road
- 47% to/from the south along Gender Road
- 1% to/from the east along Walnut Street
- 3% to/from west along Walnut Street

Site traffic was assigned to the proposed site access drives and carried through the study intersection using the distribution above. The full trip generation and volume calculations can be found in Attachment C.

Analysis and Results

Turn lane warrant analyses were conducted at the proposed site drives using ODOT standard turn lane warrant graphs. If a turn lane met the warrant in a particular scenario, the length was calculated according to the procedure in the ODOT L&D Manual. Posted speed limits are 35 mph on Gender Road and 25 mph on Walnut Street. Gender Road is classified as a major arterial and the 85th percentile speed is slightly over 40 mph. Therefore, as instructed by the City of Canal Winchester's Consulting Engineer, a design speed of 40 mph was used for Gender Road and 25 mph was used for Walnut Street during analysis and calculations.

Based on the results of the analysis, a 150' right turn lane (inclusive of a 50' diverging taper) is warranted at the proposed right-in drive along Gender Road. No other turn lanes are warranted. The full turn lane warrant analysis can be seen in Attachment D.

Capacity analysis for the Gender Road and Walnut Street intersection was conducted using Version 9 of Synchro software. A minimum Level of Service (LOS) of D for each intersection/approach and E for each individual movement is considered acceptable in urbanized areas. If the intersection or movement falls below these criteria, mitigation strategies were developed to bring each movement back to acceptable levels. The summary of the capacity analysis can be seen in Table 3 below and the full capacity analysis can be seen in Attachment E.

The eastbound approach of the Gender Road and Walnut Street intersection currently consists of a shared left-through lane and a right turn lane. The HCM 2010 module of Synchro will not calculate delay correctly for shared left-through lanes because it is non-NEMA signal phasing. Eastbound through volume is minimal in all scenarios (less than 5 vehicles in the peak hour), so the eastbound approach of the intersection essentially operates as a dedicated left turn lane and a dedicated right turn lane. Because of this, the Synchro analysis was performed with the eastbound approach consisting of a left turn lane and a shared through-right lane to produce more accurate results.

Table 3 - Summary of Capacity Analysis for Gender Rd. & Walnut St.

Intersection	Approach	2017				2027			
		AM		PM		AM		PM	
		No Build	Build	No Build	Build	No Build	Build	No Build	Build
Gender Road & Walnut Street	Northbound	A/6.7	A/9.6	B/10.7	B/10.3	A/6.8	A/9.8	B/10.9	B/10.6
	Eastbound	B/12.8	B/12.3	B/15.5	B/18.3	B/13.7	B/13.3	B/17.3	C/20.3
	Southbound	A/6.3	B/10.5	A/9.4	B/11.8	A/6.4	B/10.5	A/9.5	B/11.8
	Westbound	B/12.7	B/11.9	B/14.6	B/16.7	B/13.5	B/12.8	B/16.2	B/18.4
	OVERALL	*A/6.6*	*B/10.2*	*B/10.4*	*B/11.9*	*A/6.7*	*B/10.3*	*B/10.7*	*B/12.3*

As seen in Table 3 above, the intersection of Gender Road and Walnut Street operates within acceptable levels of service in all scenarios with and without the site development traffic.

A queuing analysis was performed using the SimTraffic application of Synchro to determine if there are any queuing issues between the Gender Road and Walnut Street intersection and the proposed site drives. Table 4 below shows the 95th Percentile queue lengths for the eastbound approach and southbound approach of the intersection.

Table 4 - Relevant 95th Percentile Queue Lengths

Intersection	Approach	2027	
		AM Build	PM Build
Gender Road & Walnut Street	Eastbound	70′	160′
	Southbound	117′	195′

Based on the results shown in Table 4, the eastbound and southbound queues in the Horizon Year will extend past the Gender Road access drive. For these reasons, said drive will have right-in, access only to avoid conflict with the Gender Road and Walnut Street intersection queues. The full-access drive along Walnut Street is unaffected by the eastbound queue of the intersection. The full queuing analysis can be seen in Attachment E (last 2 sheets of the attachment).

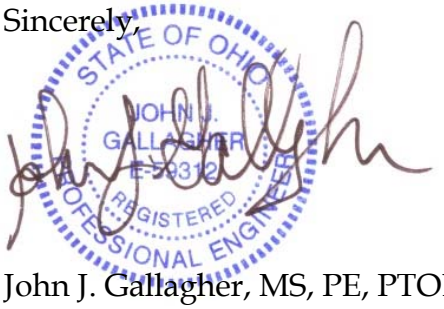
Conclusions and Recommendations

Based on the results of the turn lane warrant analysis, it is recommended that a 150′ southbound right turn lane, inclusive of a 50′ diverging taper, be installed along Gender Road to service the Gender Road right-in access. The turn lane should be installed concurrently with the development.

Results of the capacity analysis show that the intersection of Gender Road and Walnut Street can operate within acceptable standards through the Horizon Year of this development. Because of this, no improvements are recommended at this intersection. Additionally, based on the results of the queuing analysis, it is recommended that the proposed full-access drive along Walnut Street be installed at least 160′ west of the eastbound stop line of the Gender Road and Walnut Street intersection.

If I can help in any way, do not hesitate to contact me at jgallagher@cmtran.com or 614-286-0822 anytime.

Sincerely,

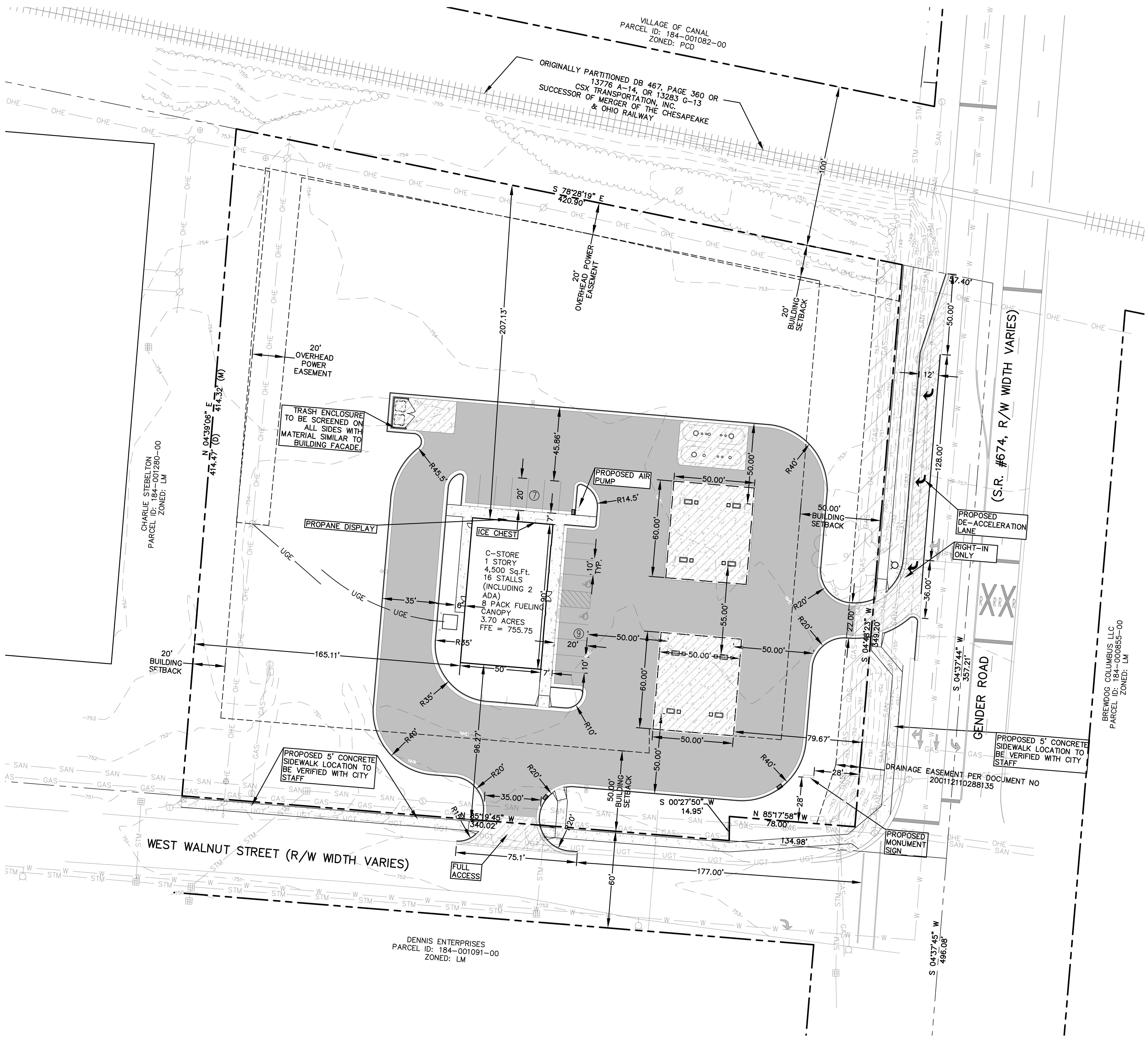


John J. Gallagher, MS, PE, PTOE
Director of Traffic & Planning Services
Carpenter Marty Transportation Inc.

Attachment A
Site Plan

Attachment A

CARPENTER MARTY transportation



BULK AREA REQUIREMENTS		
LOCATION: 880 W. WALNUT ST. CANAL WINCHESTER, FRANKLIN COUNTY, OHIO		
ZONE: LM (LIMITED MANUFACTURING)		
USE: AUTOMOBILE CONVENIENCE MARKETS "CONDITIONAL"		
ITEM	REQUIREMENTS	PROVIDED
MINIMUM LOT AREA	NONE	N/A
MINIMUM LOT FRONTAGE	NONE	N/A
MINIMUM FRONT SETBACK	50'	80'
MINIMUM SIDE SETBACK	20' NORTH/30' SOUTH	42'North/50'South
MINIMUM REAR SETBACK	20'	174'
MAXIMUM BUILDING HEIGHT	40'	31'

GROUND COVER INFORMATION		
ITEM	EXISTING	PROPOSED
IMPERVIOUS AREA	28,821 S.F./0.66 ACRES (18%)	57,371 S.F./1.32 ACRES (36%)
PERVIOUS AREA	132,481 S.F./3.04 ACRES (82%)	103,931 S.F./2.38 ACRES (64%)
TOTAL SITE AREA	161,302 S.F./3.70 ACRES (100%)	161,302 S.F./3.70 ACRES (100%)

SITE SUMMARY:

EXISTING ZONING:	LM
PROPOSED ZONING:	LM
TOTAL LAND AREA (S.F./AC.)	161,302 S.F./3.70 AC.
PROPOSED USE OR USES OF EACH BUILDING AND STRUCTURE	AUTOMOBILE CONVENIENCE MARKET
HEIGHT/NUMBER OF FLOORS	31' / (SINGLE STORY)
GROSS FLOOR AREA	4,500 S.F.
FLOOR AREA RATIO	1.76%
REQUIRED PARKING (2 SPACES REQ. PER PUMP)	16 SPACES
PROPOSED PARKING	16 SPACES

CURRENT OWNER
CONTACT PERSON: CHARLIE STEBELTON
6155 COONPATH RD.
CARROLL, OHIO 43112
(740) 756-4600

DEVELOPER
CERTIFIED OIL
CONTACT PERSON: JOHN DAMRATH
949 KING AVE.
COLUMBUS, OH 45212
(614) 506-9435

WEST PROPERTY OWNER
PARCEL ID: 184-001280-00
PARCEL ADDRESS: 880 W. WALNUT ST.
ZONED: LM
CHARLIE STEBELTON
6155 COONPATH RD.
CARROLL, OHIO 43112

SOUTH PROPERTY OWNER
PARCEL ID: 184-001091-00
PARCEL ADDRESS: 59 GENDER RD.
ZONED: LM
DENNIS ENTERPRISES
1797 SCIOTO POINTE DR.
COLUMBUS, OHIO 43221

EAST PROPERTY OWNER
PARCEL ID: 184-000855-00
PARCEL ADDRESS: 96 GENDER RD.
ZONED: LM
BREWDOG COLUMBUS LLC
STE. 1800
COLUMBUS, OHIO 43215

NORTH PROPERTY OWNER
PARCEL ID: 184-001082-00
PARCEL ADDRESS: 39 GENDER RD.
ZONED: PCD
VILLAGE OF CANAL
36 S HIGH ST
CANAL WINCHESTER, OH 43110

PAVEMENT LEGEND

PROPOSED ASPHALT PAVEMENT

PROPOSED CONCRETE PAVEMENT

PROPOSED REINFORCED CONCRETE PAVEMENT

N

SCALE: 1" = 30'

30 15 0 30 60

THIS SITE PLAN IS FOR PLANNING PURPOSES ONLY NOT FOR CONSTRUCTION

TREANORHL
1040 Vermont Street
Lawrence, Kansas
Office: 785.842.4858
Fax: 785.842.7536
www.TreanorHL.com

PROJECT OWNER
Certified
Certified Oil Company
949 King Ave. Columbus, Ohio 43212
(614)-421-7500 www.certifiedoil.com
Striving to be "The Most Customer Focused" convenience store chain in the industry!

PROJECT CIVIL ENGINEER
TREANOHL, P.A.
MATTHEW L. MURPHY, P.E.
1040 VERMONT ST.
LAWRENCE, KS, 66044
(785) 842-4858

PROJECT CLIENT
CERTIFIED OIL COMPANY
SPM: JOHN DAMRATH
949 KING AVENUE
COLUMBUS, OHIO 43212
(614) 506-9435

PROJECT LOCATION
CERTIFIED OIL COMPANY STORE
STORE 490
C-STORE WITH 8 PACK CANOPY
880 W. WALNUT ST.
CANAL WINCHESTER, OH 43110
FRANKLIN COUNTY

REV	DATE	DESCRIPTION
1	04/19/2017	CITY COMMENTS
2	05/22/2017	SITE PLAN & CONDITIONAL USE

STATE OF OHIO
MATTHEW L. MURPHY
PE-8142
REGISTERED
PROFESSIONAL ENGINEER

DATE: 04/17/2017
PROJECT NO.: CE17.001
DESIGNED BY: APB/MRS
DRAWN BY: APB/MRS
CHECKED BY: MLM

SITE LAYOUT PLAN
SHEET NO.
SHEET 2 OF 9

DATE PRINTED: 12/18/2013 12:58:02 PM
FILE PATH: D:\PSU_ARCH_cprescott.rvt
Oil\Site Concepts\490 Gender Rd - Canal Winchester, OH\Drawings\Sheets\Planning\Sheets\Site 490 Site Plan 06-15-17.dwg

Attachment B
Count Data & TCDS Data

Attachment B

CARPENTER MARTY transportation

Carpenter Marty Transportation

File Name : 170315 Gender and Walnut AM Peak
Site Code :
Start Date : 3/15/2017
Page No : 1

Groups Printed- Cars - Trucks

	GENDER From North				WALNUT From East				GENDER From South				WALNUT From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	7	148	7	162	0	0	0	0	1	200	3	204	1	0	8	9	375
07:15 AM	8	187	2	197	1	0	0	1	1	187	6	194	0	0	1	1	393
07:30 AM	11	119	5	135	1	0	0	1	0	158	5	163	1	1	5	7	306
07:45 AM	12	180	5	197	1	0	0	1	4	204	4	212	1	0	4	5	415
Total	38	634	19	691	3	0	0	3	6	749	18	773	3	1	18	22	1489
08:00 AM	14	157	4	175	0	0	0	0	0	162	1	163	5	0	12	17	355
08:15 AM	5	118	1	124	2	0	1	3	1	190	2	193	0	0	13	13	333
08:30 AM	10	129	3	142	1	0	0	1	1	123	3	127	1	0	4	5	275
08:45 AM	7	90	3	100	3	0	1	4	0	176	3	179	1	0	10	11	294
Total	36	494	11	541	6	0	2	8	2	651	9	662	7	0	39	46	1257
Grand Total	74	1128	30	1232	9	0	2	11	8	1400	27	1435	10	1	57	68	2746
Apprch %	6	91.6	2.4		81.8	0	18.2		0.6	97.6	1.9		14.7	1.5	83.8		
Total %	2.7	41.1	1.1	44.9	0.3	0	0.1	0.4	0.3	51	1	52.3	0.4	0	2.1	2.5	
Cars	62	1120	29	1211	9	0	2	11	8	1399	26	1433	9	1	48	58	2713
% Cars	83.8	99.3	96.7	98.3	100	0	100	100	100	99.9	96.3	99.9	90	100	84.2	85.3	98.8
Trucks	12	8	1	21	0	0	0	0	0	1	1	2	1	0	9	10	33
% Trucks	16.2	0.7	3.3	1.7	0	0	0	0	0	0.1	3.7	0.1	10	0	15.8	14.7	1.2

	GENDER From North				WALNUT From East				GENDER From South				WALNUT From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	7	148	**7**	162	0	0	0	0	1	200	3	204	**1**	0	**8**	**9**	375
07:15 AM	8	**187**	2	**197**	**1**	0	0	**1**	1	187	**6**	194	0	0	1	1	393
07:30 AM	11	119	5	135	1	0	0	1	0	158	5	163	1	**1**	5	7	306
07:45 AM	**12**	180	5	197	1	0	0	1	**4**	**204**	4	**212**	1	0	4	5	**415**
Total Volume	38	634	19	691	3	0	0	3	6	749	18	773	3	1	18	22	1489
% App. Total	5.5	91.8	2.7		100	0	0		0.8	96.9	2.3		13.6	4.5	81.8		
PHF	.792	.848	.679	.877	.750	.000	.000	.750	.375	.918	.750	.912	.750	.250	.563	.611	.897

Carpenter Marty Transportation

File Name : 170315 Gender and Walnut PM Peak
Site Code :
Start Date : 3/15/2017
Page No : 1

Groups Printed- Cars - Trucks

	GENDER From North				WALNUT From East				GENDER From South				WALNUT From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	17	229	6	252	3	0	4	7	16	196	2	214	1	0	6	7	480
04:15 PM	8	239	4	251	4	0	0	4	5	192	8	205	10	0	22	32	492
04:30 PM	5	265	5	275	6	0	0	6	5	198	4	207	13	1	48	62	550
04:45 PM	2	249	11	262	7	0	0	7	3	240	0	243	6	0	26	32	544
Total	32	982	26	1040	20	0	4	24	29	826	14	869	30	1	102	133	2066
05:00 PM	4	250	4	258	9	0	2	11	4	260	1	265	3	0	33	36	570
05:15 PM	2	272	9	283	9	0	1	10	4	246	0	250	1	0	6	7	550
05:30 PM	2	232	8	242	14	0	0	14	4	213	1	218	2	1	23	26	500
05:45 PM	4	275	8	287	6	0	0	6	3	177	1	181	0	0	6	6	480
Total	12	1029	29	1070	38	0	3	41	15	896	3	914	6	1	68	75	2100
Grand Total	44	2011	55	2110	58	0	7	65	44	1722	17	1783	36	2	170	208	4166
Apprch %	2.1	95.3	2.6		89.2	0	10.8		2.5	96.6	1		17.3	1	81.7		
Total %	1.1	48.3	1.3	50.6	1.4	0	0.2	1.6	1.1	41.3	0.4	42.8	0.9	0	4.1	5	
Cars	38	1997	54	2089	58	0	7	65	44	1713	16	1773	36	2	166	204	4131
% Cars	86.4	99.3	98.2	99	100	0	100	100	100	99.5	94.1	99.4	100	100	97.6	98.1	99.2
Trucks	6	14	1	21	0	0	0	0	0	9	1	10	0	0	4	4	35
% Trucks	13.6	0.7	1.8	1	0	0	0	0	0	0.5	5.9	0.6	0	0	2.4	1.9	0.8

	GENDER From North				WALNUT From East				GENDER From South				WALNUT From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**5**	265	5	275	6	0	0	6	**5**	198	**4**	207	**13**	**1**	**48**	**62**	550
04:45 PM	2	249	**11**	262	7	0	0	7	3	240	0	243	6	0	26	32	544
05:00 PM	4	250	4	258	**9**	0	**2**	**11**	4	**260**	1	**265**	3	0	33	36	**570**
05:15 PM	2	**272**	9	**283**	9	0	1	10	4	246	0	250	1	0	6	7	550
Total Volume	13	1036	29	1078	31	0	3	34	16	944	5	965	23	1	113	137	2214
% App. Total	1.2	96.1	2.7		91.2	0	8.8		1.7	97.8	0.5		16.8	0.7	82.5		
PHF	.650	.952	.659	.952	.861	.000	.375	.773	.800	.908	.313	.910	.442	.250	.589	.552	.971

OHIO DEPARTMENT OF TRANSPORTATION

MS2 Transportation Data Management System

List View | All DIRs

Record 1 of 1 Goto Record go

Location ID	87425	**MPO ID**	
Type	SPOT	**HPMS ID**	
On NHS		**On HPMS**	
LRS ID	SFRASR00674**C	**LRS Loc Pt.**	3.871
SF Group	Urban Minor Arterial (4);Collector(5-6);Local(7)	**Route Type**	SR
AF Group	URBAN_MINOR_ARTERIAL	**Route**	00674
GF Group	URBAN_MINOR_ARTERIAL		
Class Dist Grp			
WIM Group			
QC Group	Default		
Fnct'l Class	Minor Arterial	**Milepost**	
Located On	GENDER RD		
Loc On Alias			
	SR674 N OF GROVEPORT RD, IN CANAL WINCHESTER		

More Detail

STATION DATA

Directions: 2-WAY | NB 1 2 | SB 1 2

AADT

Year	AADT	DHV-30	K %	D %	PA	BC	Src
2016	20,606	1,814	9	55	19,720 (96%)	885 (4%)	
2015	20,945[3]		9	53	20,172 (96%)	772 (4%)	Grown from 2014
2014	20,723[3]		9	53	19,958 (96%)	764 (4%)	Grown from 2013
2013	21,254	1,896	9	53	20,469 (96%)	784 (4%)	
2010	18,080				16,730 (93%)	1,350 (7%)	

|<< < > >>| 1-5 of 9

Travel Demand Model

	Model Year	Model AADT	AM PHV	AM PPV	MD PHV	MD PPV	PM PHV	PM PPV	NT PHV	NT PPV

VOLUME COUNT

	Date	Int	Total
	Thu 8/4/2016	15	23,049
	Thu 5/9/2013	60	24,479

VOLUME TREND

Year	Annual Growth
2016	-2%
2015	1%
2014	-2%
2013	6%
2010	0%
2006	-1%
2003	4%
2001	6%

SPEED

	Date	Int	Pace	85th	Total
	Thu 8/4/2016	15	0 - 40	42	23,049
	Thu 5/9/2013	60	0 - 40	41	24,478

CLASSIFICATION

	Date	Int	Total
	Thu 8/4/2016	15	23,049
	Thu 5/9/2013	60	24,479

WEIGH-IN-MOTION

	Date	Axles	Avg GVW	Total
No Data				

PER VEHICLE

	Date	Axles	85th	Total
No Data				

GAP

	Date	Int	Total
No Data			

PARTIAL COUNT

Date	Int	24-Hr Total

NOTES/FILES

	Note	Date	
	87425_08_04_16.xls	8/30/2016 southerntraffic	
	87425 SD_08_04_16.JPG	8/30/2016 southerntraffic	
	87425 RT 2_08_04_16.JPG	8/30/2016 southerntraffic	
	87425 RT 1_08_04_16.JPG	8/30/2016 southerntraffic	
	87425 PD_08_04_16.JPG	8/30/2016 southerntraffic	

Attachment C
Trip Generation & Volume Calculations

Attachment C

CARPENTER MARTY transportation

PERIOD SETTING

Analysis Name :	AM Peak		
Project Name :	Gender Rd	**No :**	
Date:	4/3/2017	**City:**	
State/Province:	ohio	**Zip/Postal Code:**	
Country:	United States	**Client Name:**	Certified Oil
Analyst's Name:	GRS	**Edition:**	ITE-TGM 9th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
945 - Gasoline/Service Station With Convenience Market	Vehicle Fueling Positions	16	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Average 10.16	82 50%	81 50%	163
310 - Hotel	Rooms	50(0)	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.	Average 0.53	15 58%	11 42%	26

(0) indicates size out of range.

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
945 - Gasoline/Service Station With Convenience Market	0 %	82	0 %	81
310 - Hotel	0 %	15	0 %	11

INTERNAL TRIPS

945 - Gasoline/Service Station With Convenience Market								310 - Hotel	
Exit	81	Demand Exit:	0 % (0)	Balanced: 0	Demand Entry:	0 % (0)	**Entry**	15
Entry	82	Demand Entry:	0 % (0)	Balanced: 0	Demand Exit:	0 % (0)	**Exit**	11

945 - Gasoline/Service Station With Convenience Market

	Total Trips	Internal Trips		External Trips
		310 - Hotel	Total	
Entry	82 (100%)	0 (0%)	0 (0%)	82 (100%)
Exit	81 (100%)	0 (0%)	0 (0%)	81 (100%)
Total	163 (100%)	0 (0%)	0 (0%)	163 (100%)

310 - Hotel

	Total Trips	Internal Trips		External Trips
		945 - Gasoline/Service Station With Convenience Market	Total	
Entry	15 (100%)	0 (0%)	0 (0%)	15 (100%)
Exit	11 (100%)	0 (0%)	0 (0%)	11 (100%)
Total	26 (100%)	0 (0%)	0 (0%)	26 (100%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
945 - Gasoline/Service Station With Convenience Market	163	34 %	55	108
310 - Hotel	26	0 %	0	26

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m.

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips — 945 - Gasoline/Service Station With Convenience Market
The chosen pass-by% (34) is not provided by ITE. ITE recommends 62.

310 - Hotel
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	97
Total Exiting	92
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	0
Total Exiting Internal Capture Reduction	0
Total Entering Pass-by Reduction	28
Total Exiting Pass-by Reduction	27
Total Entering Non-Pass-by Trips	69
Total Exiting Non-Pass-by Trips	65

PERIOD SETTING

Analysis Name :	PM Peak		
Project Name :	Gender Rd	**No :**	
Date:	4/3/2017	**City:**	
State/Province:	ohio	**Zip/Postal Code:**	
Country:	United States	**Client Name:**	Certified Oil
Analyst's Name:	GRS	**Edition:**	ITE-TGM 9th Edition

Land Use	Independent Variable	Size	Time Period	Method	Entry	Exit	Total
945 - Gasoline/Service Station With Convenience Market	Vehicle Fueling Positions	16	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 13.51	108 50%	108 50%	216
310 - Hotel	Rooms	50(0)	Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.	Average 0.6	15 50%	15 50%	30

(0) indicates size out of range.

TRAFFIC REDUCTIONS

Land Use	Entry Reduction	Adjusted Entry	Exit Reduction	Adjusted Exit
945 - Gasoline/Service Station With Convenience Market	0 %	108	0 %	108
310 - Hotel	0 %	15	0 %	15

INTERNAL TRIPS

945 - Gasoline/Service Station With Convenience Market **310 - Hotel**

Exit	108	Demand Exit:	0 % (0)	Balanced: 0	Demand Entry:	0 % (0)	**Entry**	15
Entry	108	Demand Entry:	0 % (0)	Balanced: 0	Demand Exit:	0 % (0)	**Exit**	15

945 - Gasoline/Service Station With Convenience Market

	Total Trips	Internal Trips		External Trips
		310 - Hotel	Total	
Entry	108 (100%)	0 (0%)	0 (0%)	108 (100%)
Exit	108 (100%)	0 (0%)	0 (0%)	108 (100%)
Total	216 (100%)	0 (0%)	0 (0%)	216 (100%)

310 - Hotel

	Total Trips	Internal Trips		External Trips
		945 - Gasoline/Service Station With Convenience Market	Total	
Entry	15 (100%)	0 (0%)	0 (0%)	15 (100%)
Exit	15 (100%)	0 (0%)	0 (0%)	15 (100%)
Total	30 (100%)	0 (0%)	0 (0%)	30 (100%)

EXTERNAL TRIPS

Land Use	External Trips	Pass-by%	Pass-by Trips	Non-pass-by Trips
945 - Gasoline/Service Station With Convenience Market	216	34 %	73	143
310 - Hotel	30	0 %	0	30

ITE DEVIATION DETAILS

Weekday, Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m.

Landuse — No deviations from ITE.

Methods — No deviations from ITE.

External Trips — 945 - Gasoline/Service Station With Convenience Market
The chosen pass-by% (34) is not provided by ITE. ITE recommends 56.

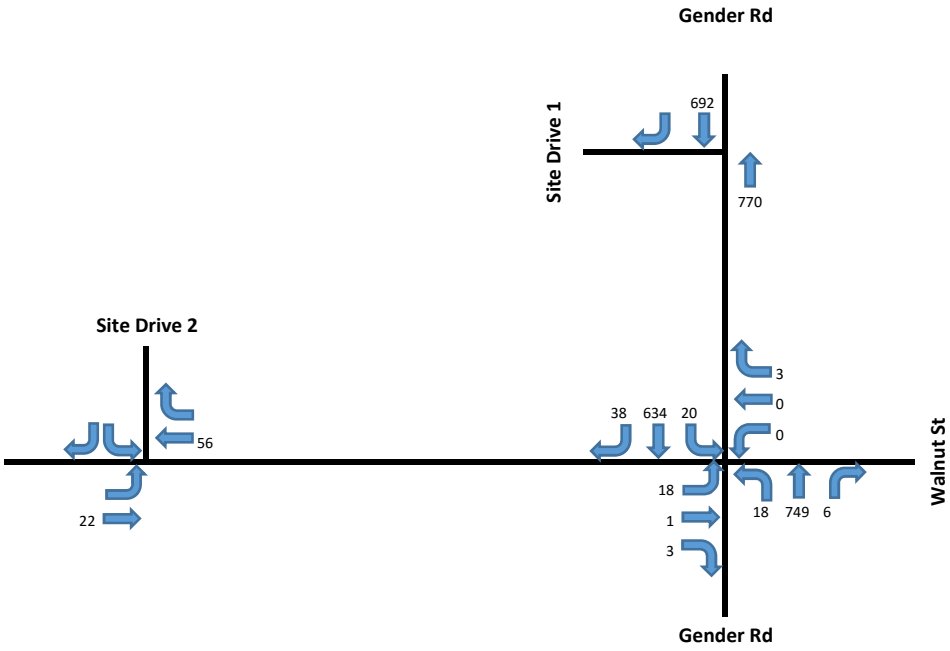
310 - Hotel
ITE does not recommend a particular pass-by% for this case.

SUMMARY

Total Entering	123
Total Exiting	123
Total Entering Reduction	0
Total Exiting Reduction	0
Total Entering Internal Capture Reduction	0
Total Exiting Internal Capture Reduction	0
Total Entering Pass-by Reduction	37
Total Exiting Pass-by Reduction	36
Total Entering Non-Pass-by Trips	86
Total Exiting Non-Pass-by Trips	87

CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	AM	No Build	A

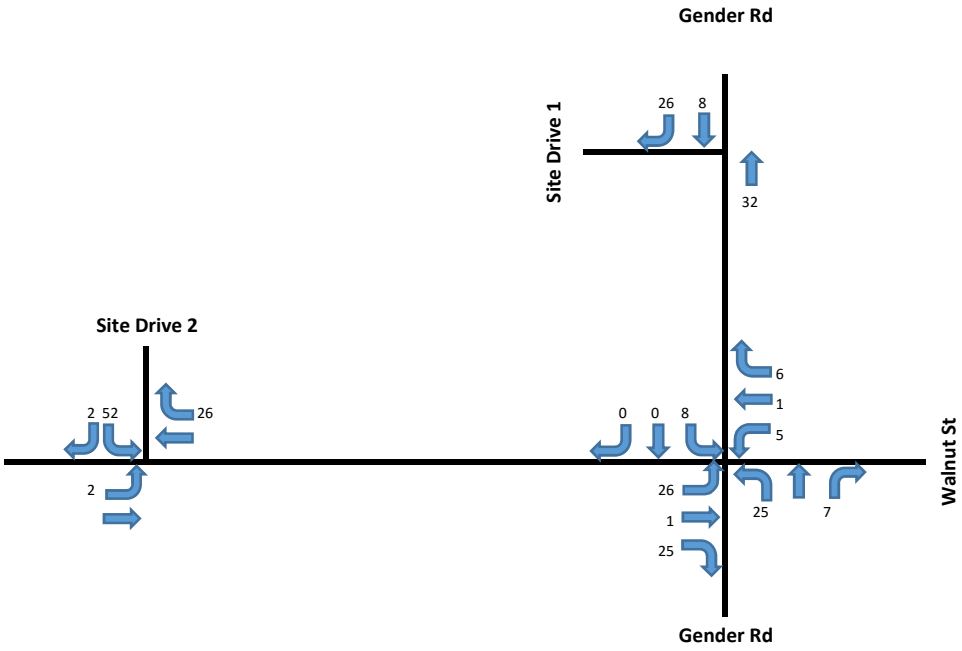
^
N



CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	AM	Non Pass By	B

^
N

Gas Station		Hotel	
Entry	54	Entry	15
Exit	54	Exit	11

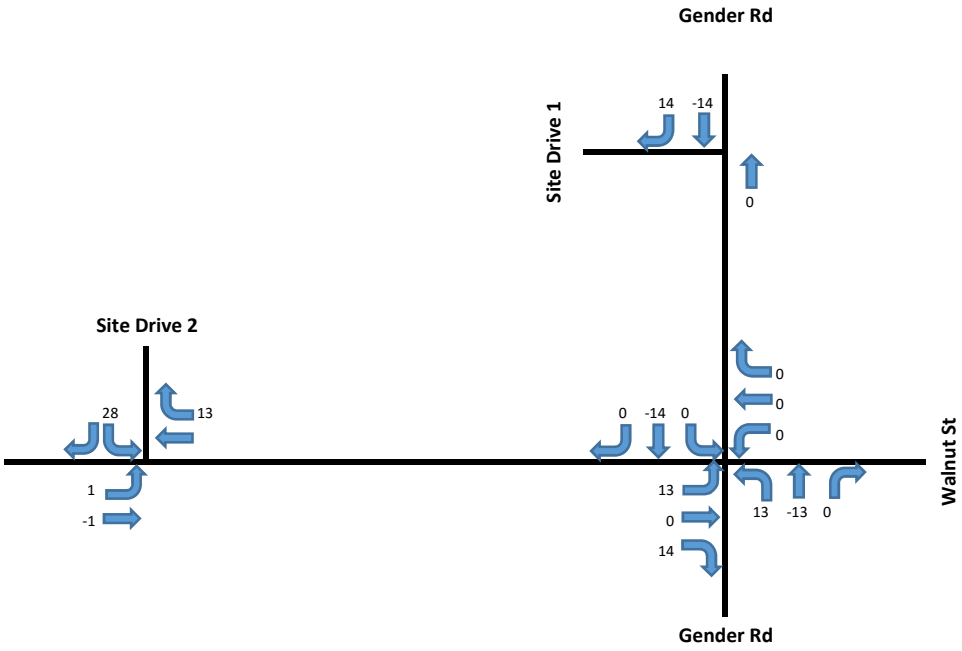


CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	AM	Pass By	C

^
N

Gas Station

Entry	**28**
Exit	**28**



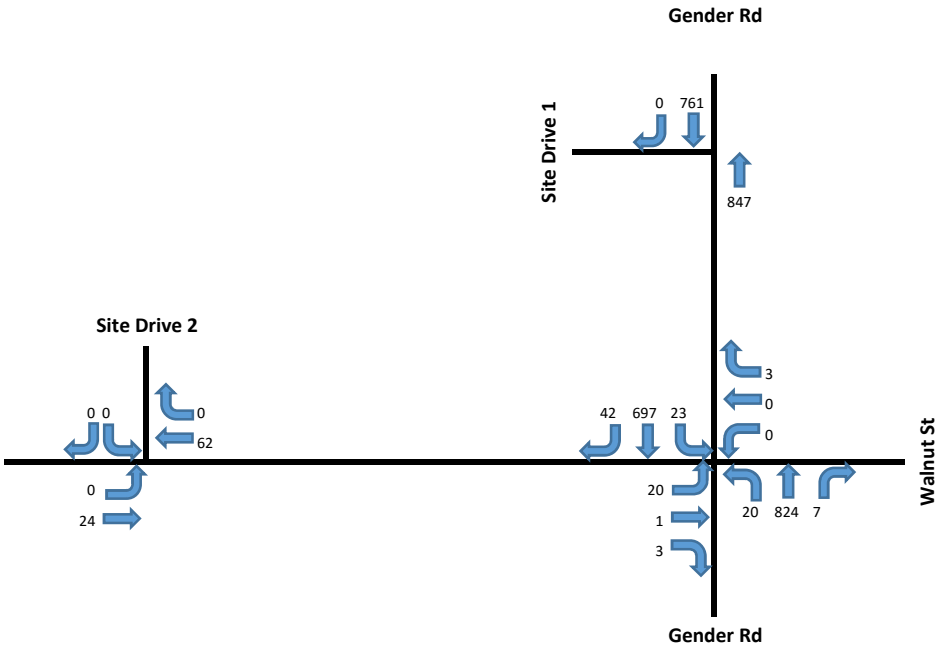
CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	AM	Build	D = A + B + C

^
N

CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2027	AM	No Build	E

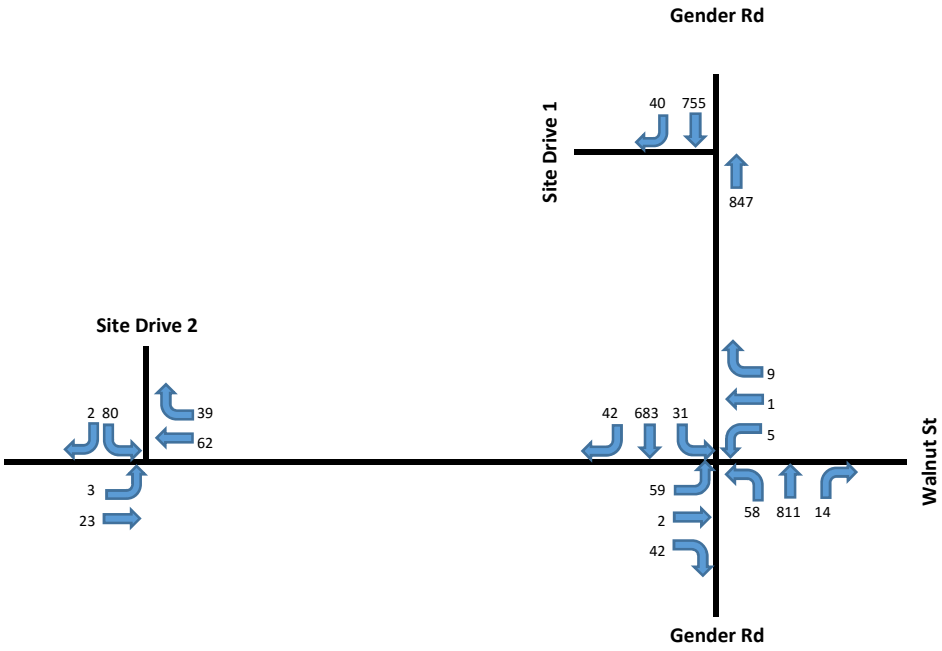
^
N

Count Year **2017**
Growth Rate **1.00%**



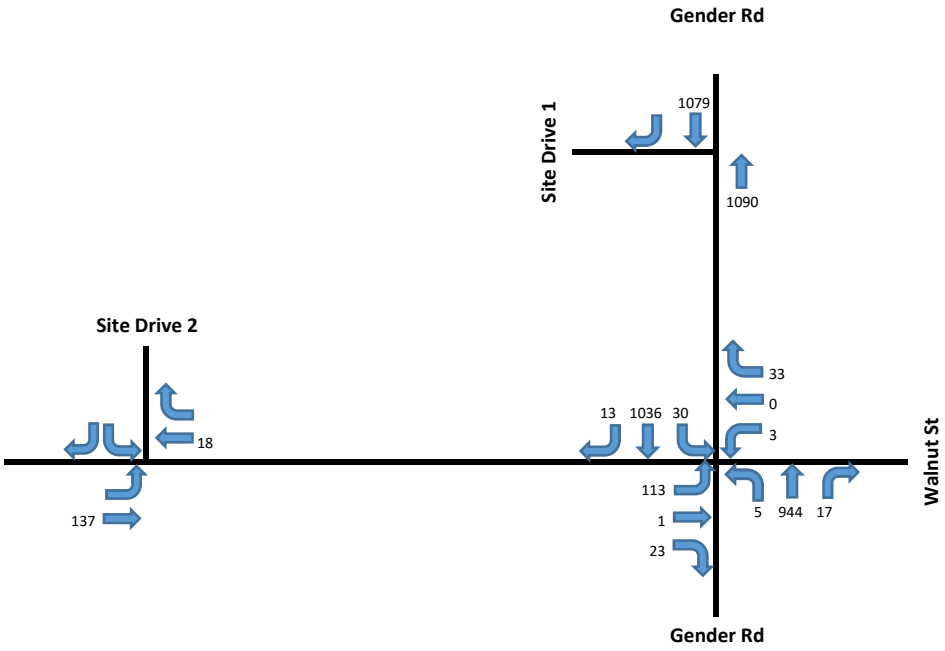
CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2027	AM	Build	F = E + B + C

^
N



CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	PM	No Build	A

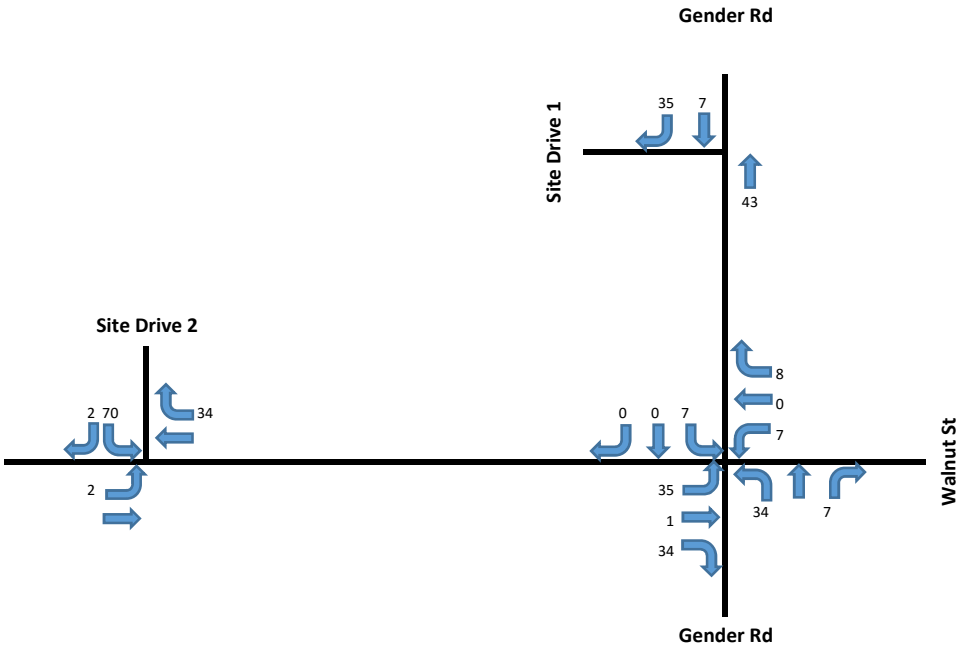
^
N



CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	PM	Non Pass By	B

^
N

Gas Station		Hotel	
Entry	71	Entry	15
Exit	72	Exit	15

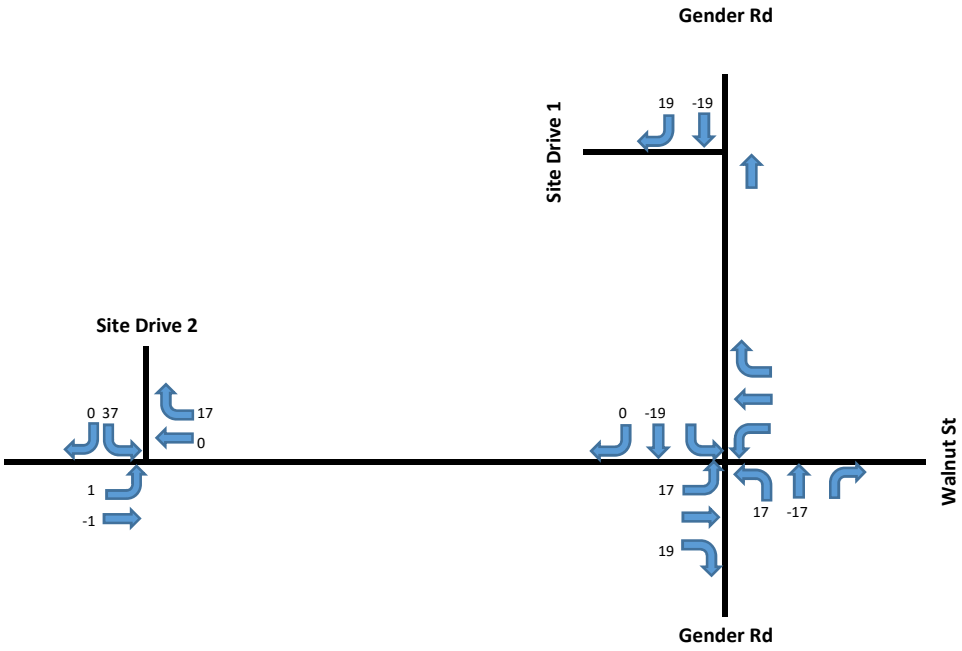


CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	PM	Pass By	C

^
N

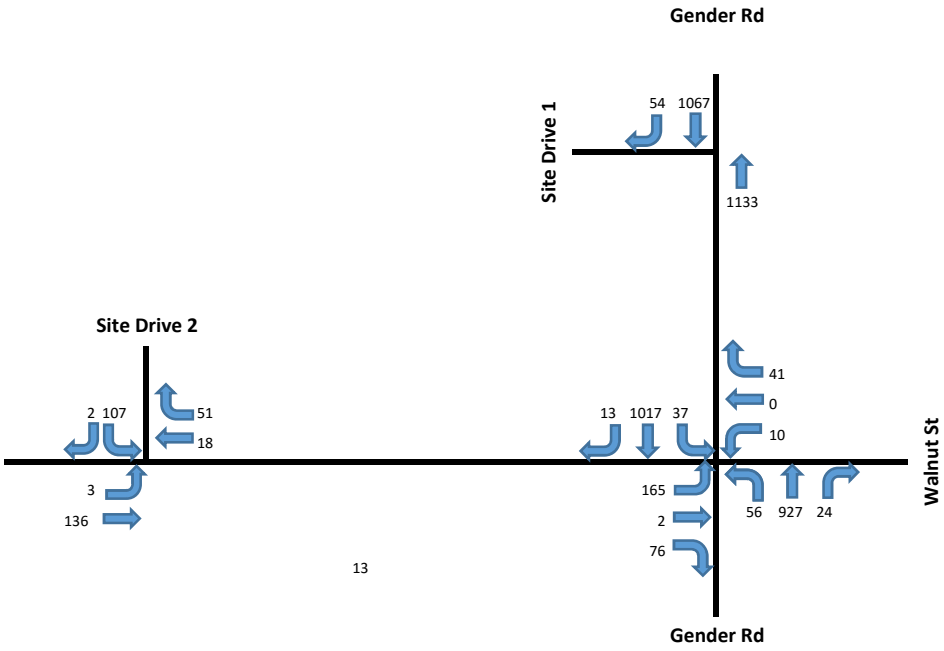
Gas Station

Entry	**37**
Exit	**37**



CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017	PM	Build	D = A + B + C

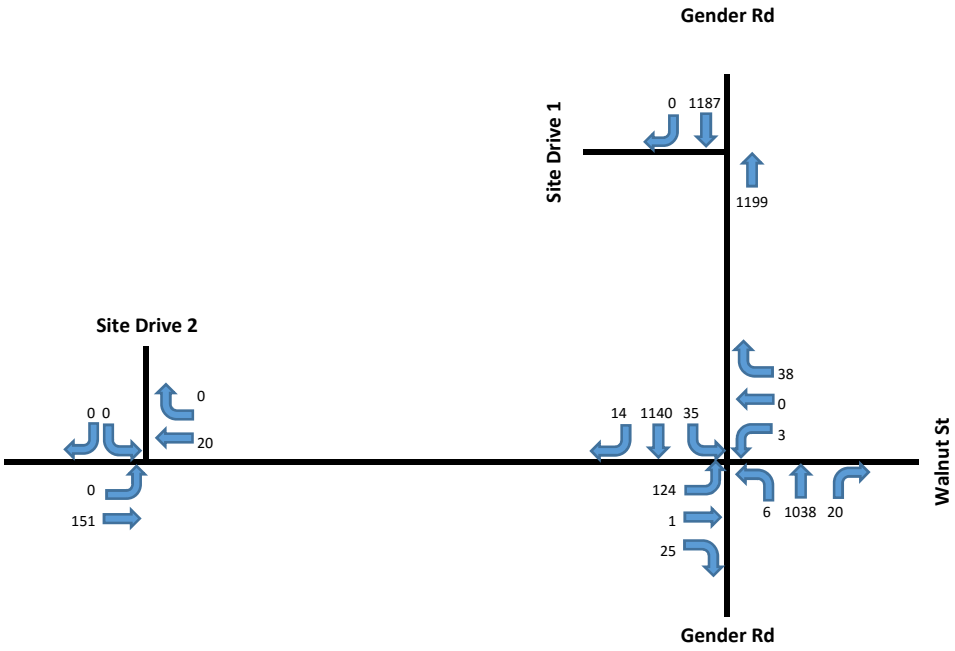
^
N



CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2027	PM	No Build	E

^
N

Count Year 2017
Growth Rate 1.00%



CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2027	PM	Build	F = E + B + C

^
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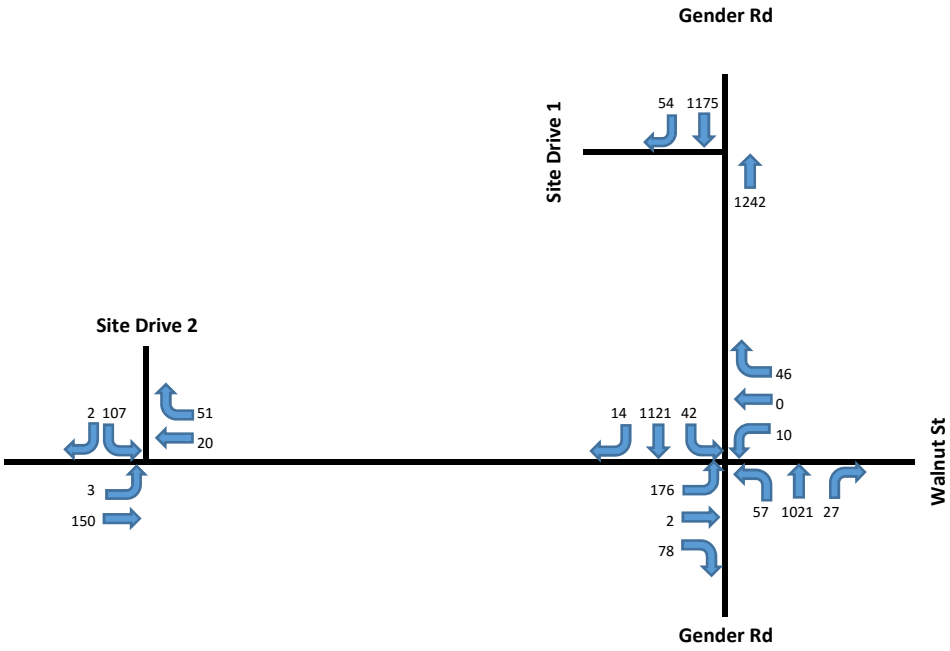

CARPENTER MARTY transportation	Year	Period	Scenario	Plate
			Non Pass By Distribution	

^
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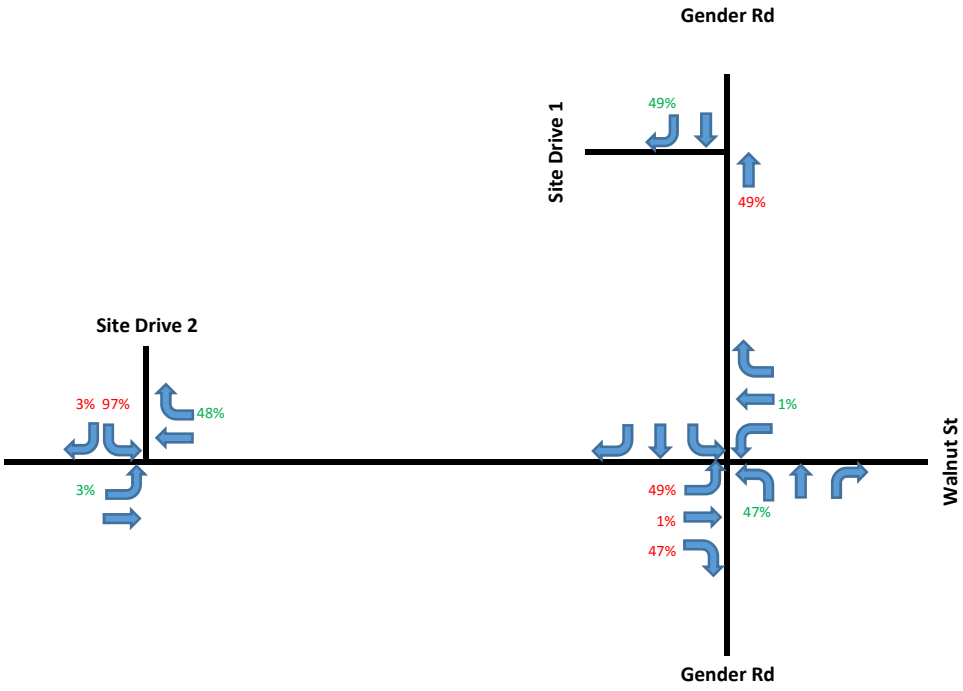
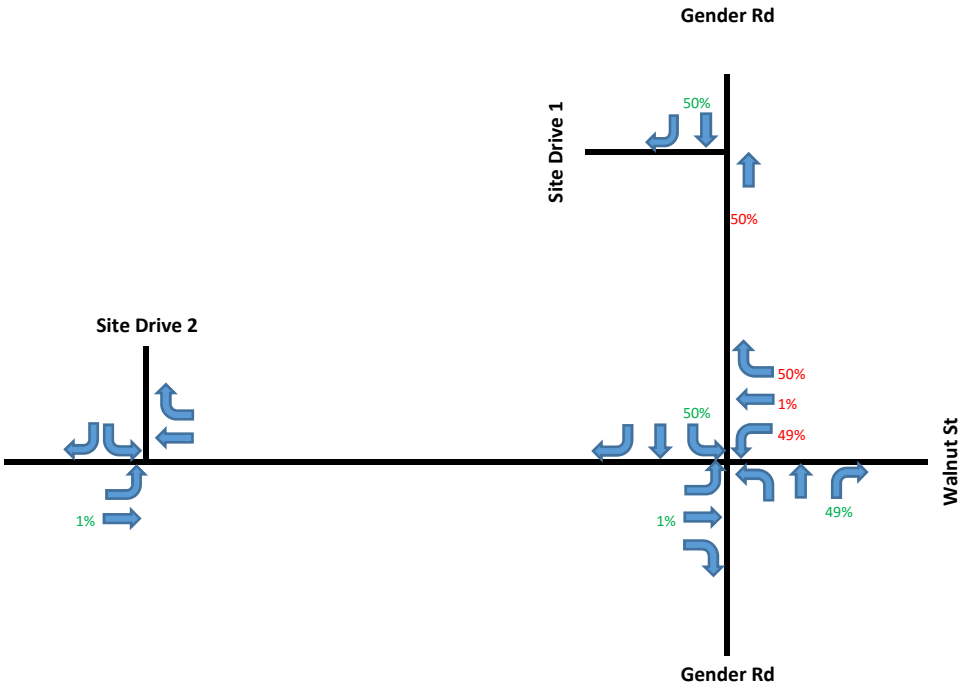


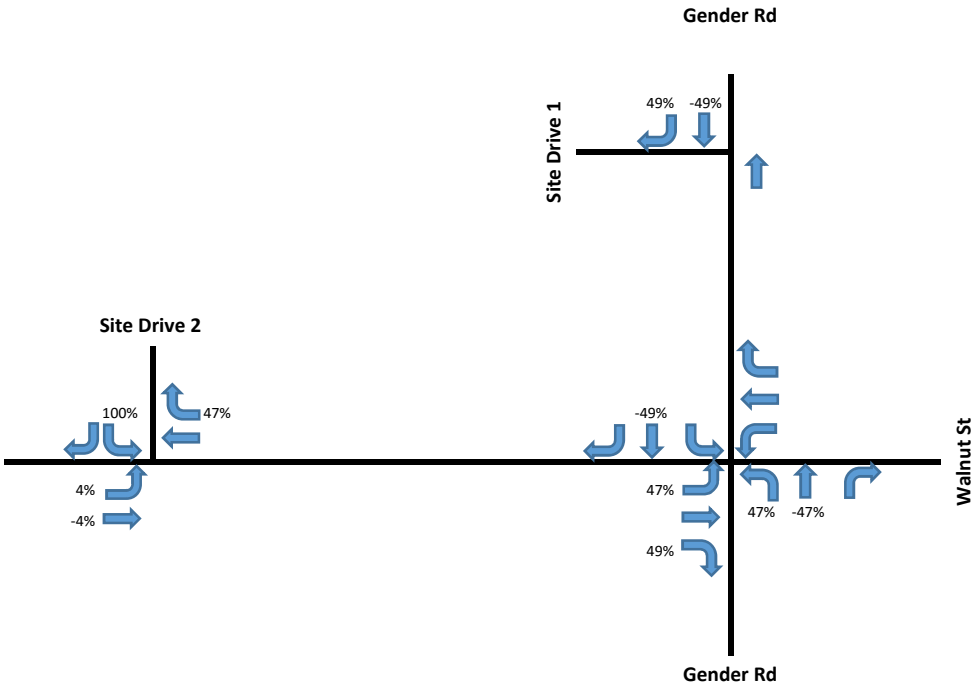
CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017		Non Pass By Distribution - Hotel	

^
N



CARPENTER MARTY transportation	Year	Period	Scenario	Plate
	2017		Pass By Distribution	

^
N



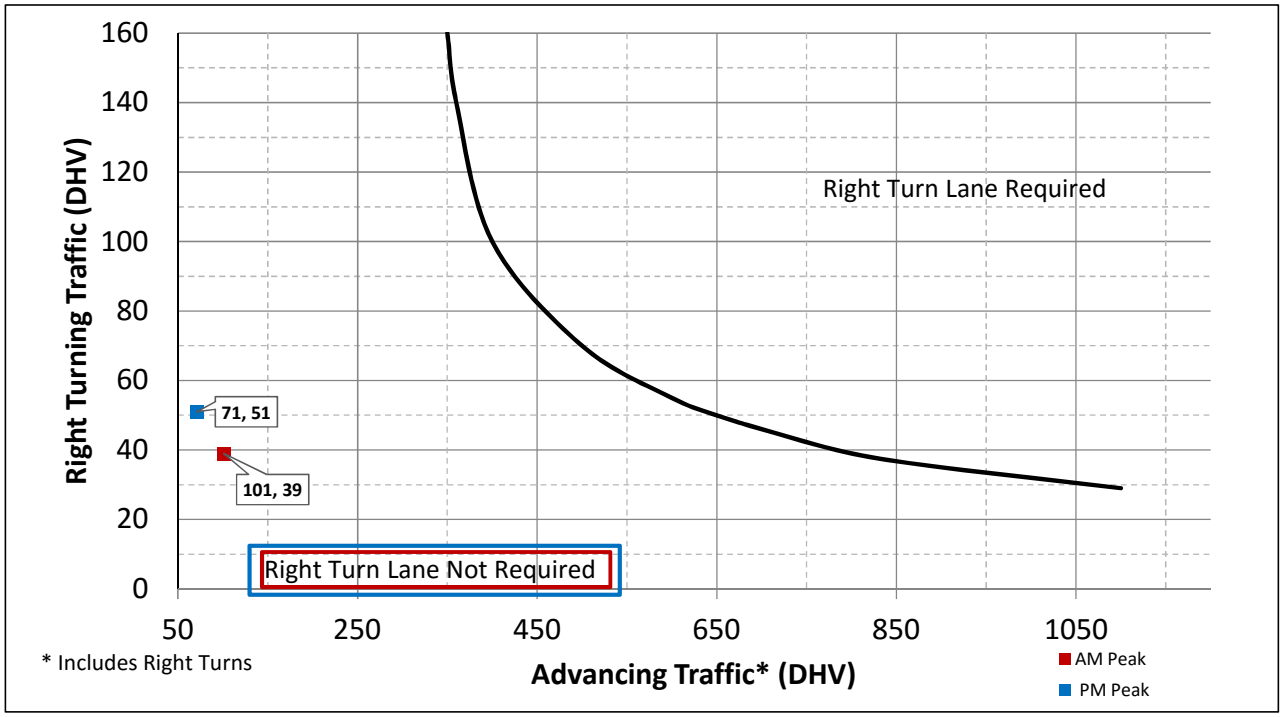
Attachment D
Turn Lane Warrants

Attachment D

CARPENTER MARTY transportation

2-Lane Highway Right Turn Lane Warrant

(= < 40 mph or 70 kph Posted Speed)



Turn Lane Length Calculations

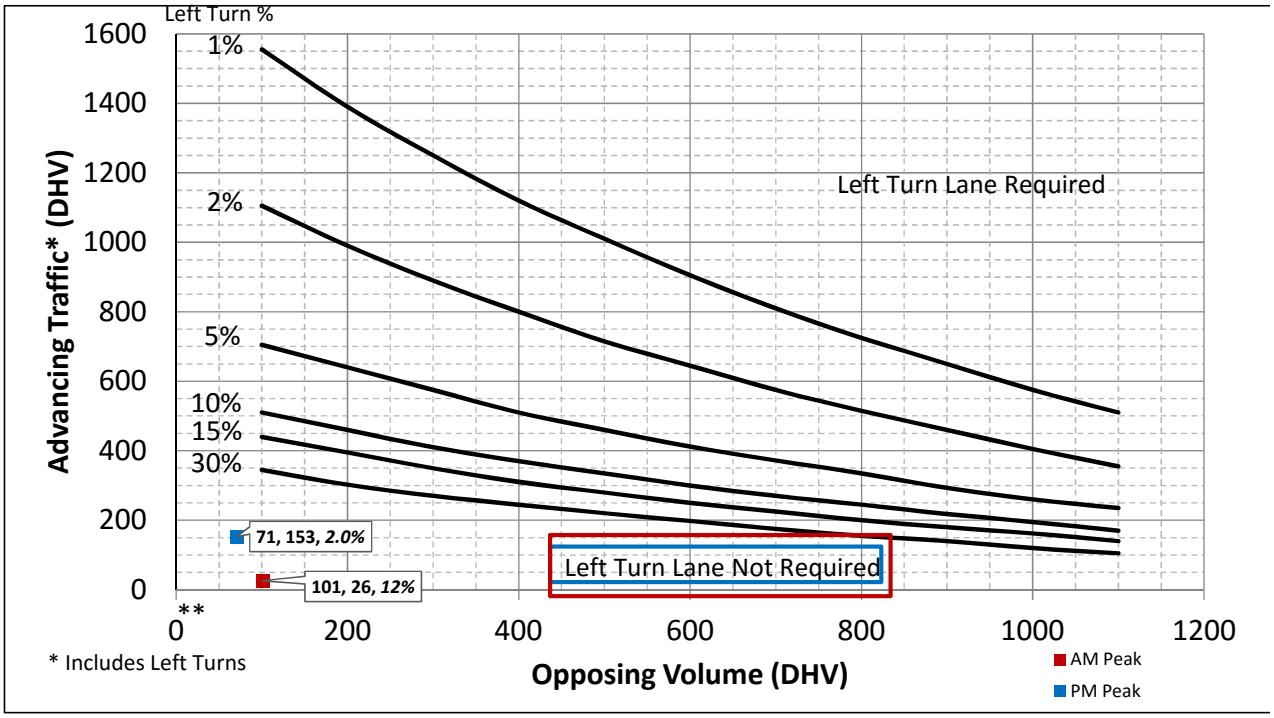
AM Peak	**Design Speed**	30	**mph**
	Traffic Control	Unsignalized	
	Cycle Length	Unsignalized	
	Cycles Per Hour	60	***Assume 60***
	Turn Lane Volume	39	**VPH**
	Advancing Traffic	101	**VPH**
	Right Turn Percentage	39%	
	Location Type	Through Road	
	Condition	A	
	Vehicles/Cycle	1	
	Turn Lane Length	100	
PM Peak	**Design Speed**	30	**mph**
	Traffic Control	Unsignalized	
	Cycle Length	Unsignalized	
	Cycles Per Hour	60	***Assume 60***
	Turn Lane Volume	51	**VPH**
	Advancing Traffic	71	**VPH**
	Right Turn Percentage	72%	
	Location Type	Through Road	
	Condition	A	
	Vehicles/Cycle	1	
	Turn Lane Length	100	
Is Right Turn Warrant Met		No	**No Right Turn Lane Required**

** Turn Lane Length includes 50 ft diverging taper*

** Turn Lane Length includes 50 ft diverging taper*

2-Lane Highway Left Turn Lane Warrant

(= < 40 mph or 70 kph Posted Speed)



Turn Lane Length Calculations

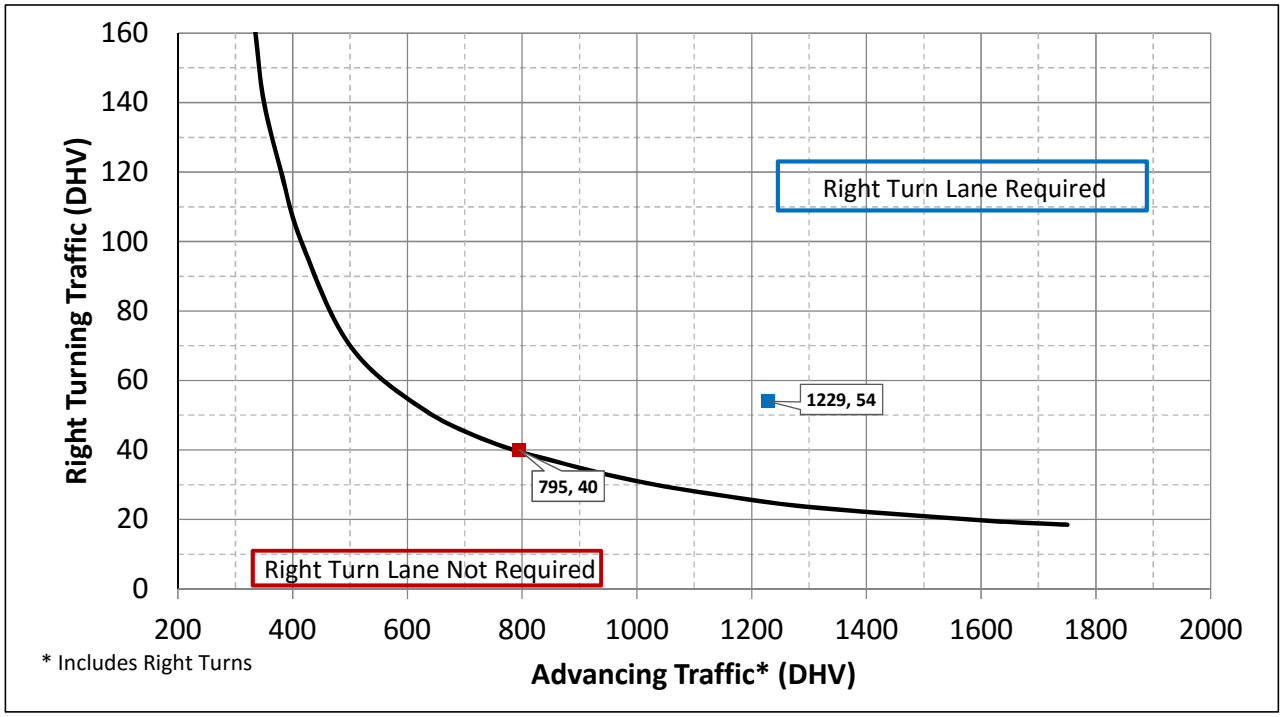
AM Peak	Design Speed	30	mph
	Traffic Control	Unsignalized	
	Cycle Length	Unsignalized	
	Cycles Per Hour	60	*Assume 60*
	Turn Lane Volume	3	VPH
	Advancing Traffic	26	VPH
	Opposing Volume	101	VPH
	Left Turn Percentage	12%	
	Location Type	Through Road	
	Condition	A	
	Vehicles/Cycle	1	
	Turn Lane Length	100	
	Offset Width	12	
	Approach Taper	180	
PM Peak	Design Speed	30	mph
	Traffic Control	Unsignalized	
	Cycle Length	Unsignalized	
	Cycles Per Hour	60	*Assume 60*
	Turn Lane Volume	3	VPH
	Advancing Traffic	153	VPH
	Opposing Volume	71	VPH
	Left Turn Percentage	2.0%	
	Location Type	Through Road	
	Condition	A	
	Vehicles/Cycle	1	
	Turn Lane Length	100	
	Offset Width	12	
	Approach Taper	180	
Is Left Turn Warrant Met		No	**No Left Turn Lane Required**

** Turn Lane Length includes 50 ft diverging taper*

** Turn Lane Length includes 50 ft diverging taper*

4-Lane Highway Right Turn Lane Warrant

(> 40 mph or 70 kph Posted Speed)



Turn Lane Length Calculations

AM Peak	**Design Speed**	40	**mph**
	Traffic Control	Unsignalized	
	Cycle Length	Unknown	
	Cycles Per Hour	60	***Assume 60***
	Turn Lane Volume	40	**VPH**
	Advancing Traffic	795	**VPH**
	Left Turn Percentage	5%	
	Location Type	Through Road	
	Condition	B	
	Vehicles/Cycle	1	
	Turn Lane Length	125	
PM Peak	**Design Speed**	40	**mph**
	Traffic Control	Unsignalized	
	Cycle Length	Unknown	
	Cycles Per Hour	60	***Assume 60***
	Turn Lane Volume	54	**VPH**
	Advancing Traffic	1229	**VPH**
	Left Turn Percentage	4%	
	Location Type	Through Road	
	Condition	B	
	Vehicles/Cycle	1	
	Turn Lane Length	125	
Is Right Turn Warrant Met		Yes	**See Above**

** Turn Lane Length includes 50 ft diverging taper*

** Turn Lane Length includes 50 ft diverging taper*

Attachment E
Capacity & Queuing Analysis

Attachment E

CARPENTER MARTY transportation

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	1	3	0	0	3	18	749	6	20	634	38
Future Volume (veh/h)	18	1	3	0	0	3	18	749	6	20	634	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	20	1	3	0	0	3	20	814	7	22	689	41
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	342	28	83	0	0	107	518	1532	13	490	1457	87
Arrive On Green	0.07	0.07	0.07	0.00	0.00	0.07	0.04	0.43	0.43	0.04	0.43	0.43
Sat Flow, veh/h	1408	411	1234	0	0	1583	1774	3596	31	1774	3395	202
Grp Volume(v), veh/h	20	0	4	0	0	3	20	401	420	22	359	371
Grp Sat Flow(s),veh/h/ln	1408	0	1645	0	0	1583	1774	1770	1857	1774	1770	1827
Q Serve(g_s), s	0.4	0.0	0.1	0.0	0.0	0.1	0.2	4.9	4.9	0.2	4.2	4.2
Cycle Q Clear(g_c), s	0.4	0.0	0.1	0.0	0.0	0.1	0.2	4.9	4.9	0.2	4.2	4.2
Prop In Lane	1.00		0.75	0.00		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	342	0	111	0	0	107	518	754	791	490	760	784
V/C Ratio(X)	0.06	0.00	0.04	0.00	0.00	0.03	0.04	0.53	0.53	0.04	0.47	0.47
Avail Cap(c_a), veh/h	1246	0	1167	0	0	1124	1038	2849	2990	1004	2849	2941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.8	0.0	12.6	0.0	0.0	12.6	4.5	6.2	6.2	4.6	5.9	5.9
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.6	0.6	0.0	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.5	2.6	0.1	2.1	2.2
LnGrp Delay(d),s/veh	12.9	0.0	12.7	0.0	0.0	12.7	4.6	6.7	6.7	4.6	6.4	6.3
LnGrp LOS	B		B			B	A	A	A	A	A	A
Approach Vol, veh/h		24			3			841			752	
Approach Delay, s/veh		12.8			12.7			6.7			6.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.6	16.8		6.4	5.5	16.9		6.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.5	46.5		20.5	9.5	46.5		20.5
Max Q Clear Time (g_c+I1), s	2.2	6.9		2.4	2.2	6.2		2.1
Green Ext Time (p_c), s	0.0	5.5		0.0	0.0	4.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Notes

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	14	51	25	14	51	25
Maximum Split (%)	15.6%	56.7%	27.8%	15.6%	56.7%	27.8%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	14	65	0	14	65
End Time (s)	14	65	0	14	65	0
Yield/Force Off (s)	9.5	60.5	85.5	9.5	60.5	85.5
Yield/Force Off 170(s)	9.5	60.5	74.5	9.5	60.5	74.5
Local Start Time (s)	76	0	51	76	0	51
Local Yield (s)	85.5	46.5	71.5	85.5	46.5	71.5
Local Yield 170(s)	85.5	46.5	60.5	85.5	46.5	60.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	57	2	42	5	1	9	56	736	13	28	620	38
Future Volume (veh/h)	57	2	42	5	1	9	56	736	13	28	620	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	62	2	46	5	1	10	61	800	14	30	674	41
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	477	13	302	181	67	197	486	1357	24	422	1163	71
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.09	0.38	0.38	0.05	0.34	0.34
Sat Flow, veh/h	1398	66	1527	260	337	993	1774	3559	62	1774	3390	206
Grp Volume(v), veh/h	62	0	48	16	0	0	61	398	416	30	352	363
Grp Sat Flow(s),veh/h/ln	1398	0	1593	1589	0	0	1774	1770	1852	1774	1770	1826
Q Serve(g_s), s	1.0	0.0	0.9	0.0	0.0	0.0	0.7	6.5	6.5	0.4	5.9	5.9
Cycle Q Clear(g_c), s	1.3	0.0	0.9	0.3	0.0	0.0	0.7	6.5	6.5	0.4	5.9	5.9
Prop In Lane	1.00		0.96	0.31		0.62	1.00		0.03	1.00		0.11
Lane Grp Cap(c), veh/h	477	0	315	444	0	0	486	675	706	422	607	626
V/C Ratio(X)	0.13	0.00	0.15	0.04	0.00	0.00	0.13	0.59	0.59	0.07	0.58	0.58
Avail Cap(c_a), veh/h	1064	0	984	1081	0	0	841	2162	2263	795	2114	2181
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	12.1	11.8	0.0	0.0	6.6	9.0	9.0	7.2	9.8	9.8
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.8	0.8	0.1	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.4	0.1	0.0	0.0	0.4	3.2	3.4	0.2	3.0	3.1
LnGrp Delay(d),s/veh	12.3	0.0	12.3	11.9	0.0	0.0	6.7	9.8	9.8	7.3	10.7	10.7
LnGrp LOS	B		B	B			A	A	A	A	B	B
Approach Vol, veh/h		110			16			875			745	
Approach Delay, s/veh		12.3			11.9			9.6			10.5	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	18.4		11.7	7.7	17.0		11.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.5	44.5		22.5	10.5	43.5		22.5
Max Q Clear Time (g_c+I1), s	2.4	8.5		3.3	2.7	7.9		2.3
Green Ext Time (p_c), s	0.0	5.3		0.4	0.1	4.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Notes

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	14	49	27	15	48	27
Maximum Split (%)	15.6%	54.4%	30.0%	16.7%	53.3%	30.0%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	14	63	0	15	63
End Time (s)	14	63	0	15	63	0
Yield/Force Off (s)	9.5	58.5	85.5	10.5	58.5	85.5
Yield/Force Off 170(s)	9.5	58.5	74.5	10.5	58.5	74.5
Local Start Time (s)	75	89	48	75	0	48
Local Yield (s)	84.5	43.5	70.5	85.5	43.5	70.5
Local Yield 170(s)	84.5	43.5	59.5	85.5	43.5	59.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	12	52	26	12	52	26
Maximum Split (%)	13.3%	57.8%	28.9%	13.3%	57.8%	28.9%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	12	64	0	12	64
End Time (s)	12	64	0	12	64	0
Yield/Force Off (s)	7.5	59.5	85.5	7.5	59.5	85.5
Yield/Force Off 170(s)	7.5	59.5	74.5	7.5	59.5	74.5
Local Start Time (s)	78	0	52	78	0	52
Local Yield (s)	85.5	47.5	73.5	85.5	47.5	73.5
Local Yield 170(s)	85.5	47.5	62.5	85.5	47.5	62.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	12	50	28	12	50	28
Maximum Split (%)	13.3%	55.6%	31.1%	13.3%	55.6%	31.1%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	12	62	0	12	62
End Time (s)	12	62	0	12	62	0
Yield/Force Off (s)	7.5	57.5	85.5	7.5	57.5	85.5
Yield/Force Off 170(s)	7.5	57.5	74.5	7.5	57.5	74.5
Local Start Time (s)	78	0	50	78	0	50
Local Yield (s)	85.5	45.5	73.5	85.5	45.5	73.5
Local Yield 170(s)	85.5	45.5	62.5	85.5	45.5	62.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	2	76	10	0	41	56	927	24	37	1017	13
Future Volume (veh/h)	165	2	76	10	0	41	56	927	24	37	1017	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	179	2	83	11	0	45	61	1008	26	40	1105	14
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	426	7	308	114	35	253	389	1657	43	391	1609	20
Arrive On Green	0.20	0.20	0.20	0.20	0.00	0.20	0.08	0.47	0.47	0.06	0.45	0.45
Sat Flow, veh/h	1356	37	1552	135	175	1270	1774	3525	91	1774	3579	45
Grp Volume(v), veh/h	179	0	85	56	0	0	61	506	528	40	546	573
Grp Sat Flow(s),veh/h/ln	1356	0	1589	1581	0	0	1774	1770	1847	1774	1770	1855
Q Serve(g_s), s	4.1	0.0	2.3	0.0	0.0	0.0	0.8	10.6	10.6	0.6	12.2	12.2
Cycle Q Clear(g_c), s	5.6	0.0	2.3	1.4	0.0	0.0	0.8	10.6	10.6	0.6	12.2	12.2
Prop In Lane	1.00		0.98	0.20		0.80	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	426	0	316	401	0	0	389	832	868	391	795	834
V/C Ratio(X)	0.42	0.00	0.27	0.14	0.00	0.00	0.16	0.61	0.61	0.10	0.69	0.69
Avail Cap(c_a), veh/h	798	0	751	817	0	0	515	1620	1690	552	1620	1698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	0.0	16.9	16.5	0.0	0.0	7.4	9.8	9.8	7.1	10.9	10.9
Incr Delay (d2), s/veh	0.7	0.0	0.5	0.2	0.0	0.0	0.2	0.7	0.7	0.1	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.0	0.7	0.0	0.0	0.4	5.2	5.4	0.3	6.2	6.4
LnGrp Delay(d),s/veh	18.7	0.0	17.3	16.7	0.0	0.0	7.6	10.5	10.5	7.2	12.0	11.9
LnGrp LOS	B		B	B			A	B	B	A	B	B
Approach Vol, veh/h		264			56			1095			1159	
Approach Delay, s/veh		18.3			16.7			10.3			11.8	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	27.9		14.4	8.5	26.8		14.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	45.5		23.5	7.5	45.5		23.5
Max Q Clear Time (g_c+I1), s	2.6	12.6		7.6	2.8	14.2		3.4
Green Ext Time (p_c), s	0.0	7.3		0.9	0.0	8.1		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	11.9
HCM 2010 LOS	B

Notes

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	12	50	28	12	50	28
Maximum Split (%)	13.3%	55.6%	31.1%	13.3%	55.6%	31.1%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	12	62	0	12	62
End Time (s)	12	62	0	12	62	0
Yield/Force Off (s)	7.5	57.5	85.5	7.5	57.5	85.5
Yield/Force Off 170(s)	7.5	57.5	74.5	7.5	57.5	74.5
Local Start Time (s)	78	0	50	78	0	50
Local Yield (s)	85.5	45.5	73.5	85.5	45.5	73.5
Local Yield 170(s)	85.5	45.5	62.5	85.5	45.5	62.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1	3	0	0	3	20	824	7	23	697	42
Future Volume (veh/h)	20	1	3	0	0	3	20	824	7	23	697	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	22	1	3	0	0	3	22	896	8	25	758	46
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	331	29	88	0	0	113	501	1612	14	473	1537	93
Arrive On Green	0.07	0.07	0.07	0.00	0.00	0.07	0.04	0.45	0.45	0.04	0.45	0.45
Sat Flow, veh/h	1408	411	1234	0	0	1583	1774	3595	32	1774	3390	206
Grp Volume(v), veh/h	22	0	4	0	0	3	22	441	463	25	396	408
Grp Sat Flow(s),veh/h/ln	1408	0	1645	0	0	1583	1774	1770	1857	1774	1770	1826
Q Serve(g_s), s	0.5	0.0	0.1	0.0	0.0	0.1	0.2	5.7	5.7	0.2	4.9	4.9
Cycle Q Clear(g_c), s	0.5	0.0	0.1	0.0	0.0	0.1	0.2	5.7	5.7	0.2	4.9	4.9
Prop In Lane	1.00		0.75	0.00		1.00	1.00		0.02	1.00		0.11
Lane Grp Cap(c), veh/h	331	0	117	0	0	113	501	794	833	473	802	828
V/C Ratio(X)	0.07	0.00	0.03	0.00	0.00	0.03	0.04	0.56	0.56	0.05	0.49	0.49
Avail Cap(c_a), veh/h	1164	0	1090	0	0	1050	977	2661	2792	941	2661	2746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	13.4	0.0	0.0	13.4	4.5	6.3	6.3	4.6	6.0	6.0
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.6	0.6	0.0	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.8	3.0	0.1	2.4	2.5
LnGrp Delay(d),s/veh	13.7	0.0	13.5	0.0	0.0	13.5	4.5	6.9	6.8	4.6	6.4	6.4
LnGrp LOS	B		B			B	A	A	A	A	A	A
Approach Vol, veh/h		26			3			926			829	
Approach Delay, s/veh		13.7			13.5			6.8			6.4	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	18.4		6.7	5.7	18.5		6.7
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	9.5	46.5		20.5	9.5	46.5		20.5
Max Q Clear Time (g_c+I1), s	2.2	7.7		2.5	2.2	6.9		2.1
Green Ext Time (p_c), s	0.0	6.2		0.0	0.0	5.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		6.7
HCM 2010 LOS		A

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	14	51	25	14	51	25
Maximum Split (%)	15.6%	56.7%	27.8%	15.6%	56.7%	27.8%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	14	65	0	14	65
End Time (s)	14	65	0	14	65	0
Yield/Force Off (s)	9.5	60.5	85.5	9.5	60.5	85.5
Yield/Force Off 170(s)	9.5	60.5	74.5	9.5	60.5	74.5
Local Start Time (s)	76	0	51	76	0	51
Local Yield (s)	85.5	46.5	71.5	85.5	46.5	71.5
Local Yield 170(s)	85.5	46.5	60.5	85.5	46.5	60.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	2	42	5	1	9	58	811	14	31	683	42
Future Volume (veh/h)	59	2	42	5	1	9	58	811	14	31	683	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	64	2	46	5	1	10	63	882	15	34	742	46
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	458	13	294	173	64	191	476	1440	24	412	1255	78
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.40	0.40	0.06	0.37	0.37
Sat Flow, veh/h	1398	66	1527	264	332	992	1774	3561	61	1774	3386	210
Grp Volume(v), veh/h	64	0	48	16	0	0	63	438	459	34	388	400
Grp Sat Flow(s),veh/h/ln	1398	0	1593	1588	0	0	1774	1770	1852	1774	1770	1826
Q Serve(g_s), s	1.1	0.0	1.0	0.0	0.0	0.0	0.8	7.6	7.6	0.4	6.9	6.9
Cycle Q Clear(g_c), s	1.4	0.0	1.0	0.3	0.0	0.0	0.8	7.6	7.6	0.4	6.9	6.9
Prop In Lane	1.00		0.96	0.31		0.62	1.00		0.03	1.00		0.11
Lane Grp Cap(c), veh/h	458	0	307	428	0	0	476	716	749	412	656	677
V/C Ratio(X)	0.14	0.00	0.16	0.04	0.00	0.00	0.13	0.61	0.61	0.08	0.59	0.59
Avail Cap(c_a), veh/h	998	0	923	1014	0	0	752	2073	2169	702	2027	2092
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.2	0.0	13.0	12.8	0.0	0.0	6.5	9.2	9.2	7.1	9.8	9.8
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.0	0.0	0.0	0.1	0.9	0.8	0.1	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	0.1	0.0	0.0	0.4	3.8	4.0	0.2	3.5	3.6
LnGrp Delay(d),s/veh	13.3	0.0	13.3	12.8	0.0	0.0	6.7	10.0	10.0	7.1	10.7	10.7
LnGrp LOS	B		B	B			A	B	A	A	B	B
Approach Vol, veh/h		112			16			960			822	
Approach Delay, s/veh		13.3			12.8			9.8			10.5	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	20.2		12.0	8.0	18.9		12.0
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	8.5	45.5		22.5	9.5	44.5		22.5
Max Q Clear Time (g_c+I1), s	2.4	9.6		3.4	2.8	8.9		2.3
Green Ext Time (p_c), s	0.0	6.1		0.4	0.1	5.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	10.3
HCM 2010 LOS	B

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	13	50	27	14	49	27
Maximum Split (%)	14.4%	55.6%	30.0%	15.6%	54.4%	30.0%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	13	63	0	14	63
End Time (s)	13	63	0	14	63	0
Yield/Force Off (s)	8.5	58.5	85.5	9.5	58.5	85.5
Yield/Force Off 170(s)	8.5	58.5	74.5	9.5	58.5	74.5
Local Start Time (s)	76	89	49	76	0	49
Local Yield (s)	84.5	44.5	71.5	85.5	44.5	71.5
Local Yield 170(s)	84.5	44.5	60.5	85.5	44.5	60.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	1	25	3	0	38	6	1038	20	35	1140	14
Future Volume (veh/h)	124	1	25	3	0	38	6	1038	20	35	1140	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	135	1	27	3	0	41	7	1128	22	38	1239	15
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	423	11	298	86	14	288	285	1663	32	359	1838	22
Arrive On Green	0.19	0.19	0.19	0.19	0.00	0.19	0.01	0.47	0.47	0.06	0.51	0.51
Sat Flow, veh/h	1360	57	1535	34	74	1481	1774	3551	69	1774	3581	43
Grp Volume(v), veh/h	135	0	28	44	0	0	7	562	588	38	612	642
Grp Sat Flow(s),veh/h/ln	1360	0	1592	1589	0	0	1774	1770	1851	1774	1770	1855
Q Serve(g_s), s	2.8	0.0	0.7	0.0	0.0	0.0	0.1	12.0	12.0	0.5	12.4	12.4
Cycle Q Clear(g_c), s	3.9	0.0	0.7	1.1	0.0	0.0	0.1	12.0	12.0	0.5	12.4	12.4
Prop In Lane	1.00		0.96	0.07		0.93	1.00		0.04	1.00		0.02
Lane Grp Cap(c), veh/h	423	0	309	388	0	0	285	829	867	359	908	952
V/C Ratio(X)	0.32	0.00	0.09	0.11	0.00	0.00	0.02	0.68	0.68	0.11	0.67	0.67
Avail Cap(c_a), veh/h	736	0	676	749	0	0	537	1778	1859	532	1778	1863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	16.0	16.1	0.0	0.0	7.6	10.0	10.0	7.1	8.7	8.7
Incr Delay (d2), s/veh	0.4	0.0	0.1	0.1	0.0	0.0	0.0	1.0	0.9	0.1	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.3	0.5	0.0	0.0	0.0	6.0	6.3	0.2	6.2	6.5
LnGrp Delay(d),s/veh	17.6	0.0	16.1	16.2	0.0	0.0	7.7	11.0	10.9	7.3	9.6	9.6
LnGrp LOS	B		B	B			A	B	B	A	A	A
Approach Vol, veh/h		163			44			1157			1292	
Approach Delay, s/veh		17.3			16.2			10.9			9.5	
Approach LOS		B			B			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	27.1		13.9	5.1	29.3		13.9
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	48.5		20.5	7.5	48.5		20.5
Max Q Clear Time (g_c+I1), s	2.5	14.0		5.9	2.1	14.4		3.1
Green Ext Time (p_c), s	0.0	8.7		0.4	0.0	9.9		0.1

Intersection Summary		
HCM 2010 Ctrl Delay		10.7
HCM 2010 LOS		B

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	12	53	25	12	53	25
Maximum Split (%)	13.3%	58.9%	27.8%	13.3%	58.9%	27.8%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	12	65	0	12	65
End Time (s)	12	65	0	12	65	0
Yield/Force Off (s)	7.5	60.5	85.5	7.5	60.5	85.5
Yield/Force Off 170(s)	7.5	60.5	74.5	7.5	60.5	74.5
Local Start Time (s)	78	0	53	78	0	53
Local Yield (s)	85.5	48.5	73.5	85.5	48.5	73.5
Local Yield 170(s)	85.5	48.5	62.5	85.5	48.5	62.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	65

Splits and Phases: 3: Gender Rd & Walnut St

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	2	78	10	0	46	57	1021	27	42	1121	14
Future Volume (veh/h)	176	2	78	10	0	46	57	1021	27	42	1121	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	191	2	85	11	0	50	62	1110	29	46	1218	15
Adj No. of Lanes	1	1	0	0	1	0	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	7	291	103	31	243	371	1739	45	379	1717	21
Arrive On Green	0.19	0.19	0.19	0.19	0.00	0.19	0.08	0.49	0.49	0.06	0.48	0.48
Sat Flow, veh/h	1349	37	1552	121	164	1297	1774	3524	92	1774	3580	44
Grp Volume(v), veh/h	191	0	87	61	0	0	62	557	582	46	602	631
Grp Sat Flow(s),veh/h/ln	1349	0	1589	1582	0	0	1774	1770	1846	1774	1770	1855
Q Serve(g_s), s	4.8	0.0	2.5	0.0	0.0	0.0	0.8	12.4	12.4	0.6	14.2	14.2
Cycle Q Clear(g_c), s	6.5	0.0	2.5	1.7	0.0	0.0	0.8	12.4	12.4	0.6	14.2	14.2
Prop In Lane	1.00		0.98	0.18		0.82	1.00		0.05	1.00		0.02
Lane Grp Cap(c), veh/h	402	0	297	376	0	0	371	873	911	379	848	889
V/C Ratio(X)	0.48	0.00	0.29	0.16	0.00	0.00	0.17	0.64	0.64	0.12	0.71	0.71
Avail Cap(c_a), veh/h	747	0	704	766	0	0	481	1517	1583	515	1517	1590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	0.0	18.5	18.2	0.0	0.0	7.6	9.9	9.9	7.1	10.9	10.9
Incr Delay (d2), s/veh	0.9	0.0	0.5	0.2	0.0	0.0	0.2	0.8	0.7	0.1	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	1.1	0.8	0.0	0.0	0.4	6.1	6.3	0.3	7.1	7.4
LnGrp Delay(d),s/veh	20.9	0.0	19.1	18.4	0.0	0.0	7.8	10.7	10.7	7.2	12.0	12.0
LnGrp LOS	C		B	B			A	B	B	A	B	B
Approach Vol, veh/h		278			61			1201			1279	
Approach Delay, s/veh		20.3			18.4			10.6			11.8	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	30.7		14.4	8.7	29.9		14.4
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	7.5	45.5		23.5	7.5	45.5		23.5
Max Q Clear Time (g_c+I1), s	2.6	14.4		8.5	2.8	16.2		3.7
Green Ext Time (p_c), s	0.0	8.3		1.0	0.0	9.2		0.3

Intersection Summary		
HCM 2010 Ctrl Delay		12.3
HCM 2010 LOS		B

Phase Number	1	2	4	5	6	8
Movement	SBL	NBTL	EBTL	NBL	SBTL	WBTL
Lead/Lag	Lead	Lag		Lead	Lag	
Lead-Lag Optimize	Yes	Yes		Yes	Yes	
Recall Mode	None	Min	None	None	Min	None
Maximum Split (s)	12	50	28	12	50	28
Maximum Split (%)	13.3%	55.6%	31.1%	13.3%	55.6%	31.1%
Minimum Split (s)	11.5	22.5	22.5	11.5	22.5	22.5
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1	1	1	1	1	1
Minimum Initial (s)	7	10	10	7	10	10
Vehicle Extension (s)	3	3	3	3	3	3
Minimum Gap (s)	3	3	3	3	3	3
Time Before Reduce (s)	0	0	0	0	0	0
Time To Reduce (s)	0	0	0	0	0	0
Walk Time (s)		7	7		7	7
Flash Dont Walk (s)		11	11		11	11
Dual Entry	No	Yes	Yes	No	Yes	Yes
Inhibit Max	Yes	Yes	Yes	Yes	Yes	Yes
Start Time (s)	0	12	62	0	12	62
End Time (s)	12	62	0	12	62	0
Yield/Force Off (s)	7.5	57.5	85.5	7.5	57.5	85.5
Yield/Force Off 170(s)	7.5	57.5	74.5	7.5	57.5	74.5
Local Start Time (s)	78	0	50	78	0	50
Local Yield (s)	85.5	45.5	73.5	85.5	45.5	73.5
Local Yield 170(s)	85.5	45.5	62.5	85.5	45.5	62.5

Intersection Summary	
Cycle Length	90
Control Type	Semi Act-Uncoord
Natural Cycle	60

Splits and Phases: 3: Gender Rd & Walnut St

Intersection: 3: Gender Rd & Walnut St

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	91	64	36	60	149	130	48	141	132
Average Queue (ft)	35	25	9	23	72	41	17	68	45
95th Queue (ft)	70	54	32	51	126	95	44	117	97
Link Distance (ft)	334	334	500	1024	1024	1024		189	189
Upstream Blk Time (%)									0
Queuing Penalty (veh)									0
Storage Bay Dist (ft)							210		
Storage Blk Time (%)									
Queuing Penalty (veh)									

Intersection: 6: Gender Rd & Site Drive 1

Movement
Directions Served
Maximum Queue (ft)
Average Queue (ft)
95th Queue (ft)
Link Distance (ft)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (ft)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 10: Walnut St

Movement	SB	SB
Directions Served	L	R
Maximum Queue (ft)	65	29
Average Queue (ft)	31	2
95th Queue (ft)	51	14
Link Distance (ft)	108	108
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Network Summary

Network wide Queuing Penalty: 0

Intersection: 3: Gender Rd & Walnut St

Movement	EB	EB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	TR	LTR	L	T	TR	L	T	TR
Maximum Queue (ft)	212	74	60	63	210	198	127	224	183
Average Queue (ft)	89	34	28	26	107	78	29	121	88
95th Queue (ft)	160	65	56	55	177	154	78	195	162
Link Distance (ft)	334	334	500	1024	1024	1024		189	189
Upstream Blk Time (%)							0	1	0
Queuing Penalty (veh)							0	3	1
Storage Bay Dist (ft)							210		
Storage Blk Time (%)							0	1	
Queuing Penalty (veh)							0	0	

Intersection: 6: Gender Rd & Site Drive 1

Movement	SB
Directions Served	T
Maximum Queue (ft)	6
Average Queue (ft)	0
95th Queue (ft)	5
Link Distance (ft)	584
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: Walnut St

Movement	EB	SB	SB
Directions Served	LT	L	R
Maximum Queue (ft)	5	62	30
Average Queue (ft)	0	32	2
95th Queue (ft)	4	55	15
Link Distance (ft)	436	108	108
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 4